Lectures
ON THE
SURGICAL TREATMENT OF EMPYEMA.

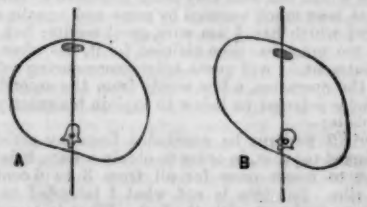
Delivered at the Hospital for Consumption and Diseases of the Chest, Brompton.

By RICKMAN J. GODLEE, M.S., F.R.C.S.,
SURGEON TO THE HOSPITAL, AND SURGEON TO UNIVERSITY COLLEGE HOSPITAL.

LECTURE II.

GENTLEMEN,—In the last lecture we were engaged in discussing some points in the treatment of recent cases of empyema. We have now to consider what can be done for the cure of a case which has become chronic, and in which the efforts of nature to close the cavity have been brought to a standstill. Such cases are more common amongst adults than children for obvious reasons, and may be classified under three headings: (1) Those in which a mere sinus remains, surrounded by dense fibrous walls; (2) those in which a large cavity exists, the lung being more or less completely collapsed, the diaphragm having been drawn up to the utmost possible extent, and the structures in the mediastinum and the opposite side of the chest having come over to the diseased side as much as possible, but the chest wall having fallen in only to a very slight extent; and

FIG. 1.

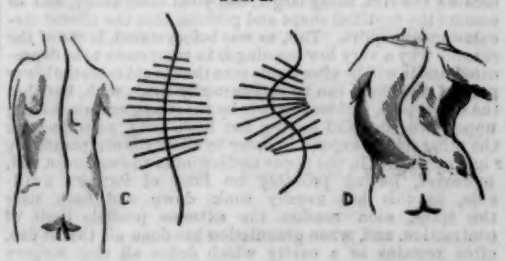


Cyrtometric tracings at about the level of the nipple.
A, A case of empyema. B, A case of lateral curvature.

(3) those in which the chest wall has fallen in to a considerable extent, producing often great deformity, but leaving a cavity which cannot close. In all of these cases the pleura becomes remarkably thickened, forming a dense layer of hard fibrous tissue, reaching at times an inch or more in thickness. The deformity of the chest which is produced follows from the fact that the ribs are drawn close together like the segments of a closed fan; the result of this is a lateral curvature of the dorsal spine, the concavity being directed towards the affected side. A consequence of this, again, is the separation of the ribs on the sound side, like the segments of a fan that has been opened, and thus a deformity is produced somewhat like that which occurs in ordinary cases of scoliosis. The angles of the ribs on the affected side become flattened out, while those on the sound side become more acute, and there is a corresponding flattening in front on the sound side; but there is not, as in ordinary lateral curvature, as a rule, any increased angularity on the affected side near the junction of the ribs and cartilages. On the contrary, the diseased side is flattened both in front and behind, as may be seen from the accompanying cyrtometric tracings of the two conditions (Fig. 1, A B). The diagrams (FIG 2, C D) illustrate the difference in the nature of the curve which occurs; for while after an empyema the dorsal curve is very long and occupies the whole dorsal region, in scoliosis we generally find a compensatory curve beginning at the lower part of the back; and thus, while in the former case all the ribs are separated, in the latter some are separated and others approximated. The prominence of the angles, together with the separation of the ribs on the sound side, causes an elevation of the shoulder and a prominence of the scapula, giving a humped appearance to the back, which becomes more and more mesial in position as the disproportion between the two sides becomes more and more marked, so that in an exaggerated case, when the clothes are on, it comes to have an outward resemblance to that produced by an angular curvature in the dorsal region. The compensatory curves in the lumbar and cervical regions are shorter than those of ordinary lateral curvature, and there is much less rotation of the bodies of the vertebræ, so that the curve indicated by the line of the spines corresponds more nearly with the actual curve of the bodies than is the case in the latter condition. The net result is that the affected side has a much smaller capacity than before, while the sound side is larger, and can thus accommodate the working lung, the size of which is increased by compensatory hypertrophy. In the most exaggerated cases there is occasionally a very acute prominence parallel with the sternum, near the junction of the ribs and their cartilages. The size of the cavity, provided there be a free outlet, determines the amount of discharge, and this again determines the amount of the constitutional disturbance from which the patient will suffer. What these disturbances are, and what the prospect for the patient is if left alone, must next be considered.

A patient with a small cavity and a pretty free opening may go on for a long time—i.e., for a considerable number of years—without any very serious symptoms manifesting themselves. The oldest case of empyema of which I have any notes is that of a man upon whom I operated at Charing-cross Hospital when I was assistant-surgeon there in the year 1876. He was then not much over twenty years of age; he had a good family history, and showed no signs of tubercular disease. If it is possible under any circumstances to trace the cause of this disease to an injury, this seemed to be a case in point. At all events, his illness

FIG. 2.



The above illustrates the difference between the curve of the spine and the deformity in the ribs in—C, a case of empyema; D, a case of lateral curvature. The schemes of the arrangement of the ribs are purely diagrammatic; the drawings of the backs are from actual cases.

appeared to depend upon the fall of a load of gravel on to his back some time previously, but it is not clear that he sustained a fracture of his ribs. When he came under notice he had his right chest full of fluid, which had made its way through the chest walls, so that he had a large collection of matter in the soft parts at the lower and posterior part of his axilla. After opening this the finger was passed into the cavity, and, being used as a guide, an incision was made in about the eighth or ninth space, and drainage-tubes were inserted. The case pursued a pretty favourable course. The antiseptic dressings employed at first were ultimately given up, and the cavity became much reduced in size, so that it would contain at last not more than an ounce. He had a small necrosis of one of the ribs, which separated, and after the employment of a variety of tubes and the use of injections, &c., he at last settled down to wear a piece of a No. 12 English gum-elastic catheter, which he has continued to do ever since. I have kept this man constantly under observation, for he now attends at University College Hospital, and though at times he suffers from a slight accumulation when the tube becomes blocked, he has continued to lead an active life as a costermonger, not feeling, however, strong enough to resume his original occupation as a navvy. He stoutly refuses to submit to any other operation. Well, for years this man showed no signs of suffering from the prolonged discharge; his muscular development was good, and his health also quite satisfactory; but of late years he has slowly and steadily began to show signs of albuminoid

degeneration. His skin is now more sallow than it was, his liver can be felt and is enlarged, and his fingers are clubbed, but it is impossible to say that he may not have several more years of active life before him. Cases of this kind must be borne in mind in advising a patient to undergo the somewhat formidable, though I believe not really dangerous, operation I shall presently describe.

This may be taken as typical of a considerable class of cases, and I could easily mention others in point from amongst our own patients. But in most of them the discharge comparatively soon produces marked changes: the great clubbing of the fingers, and, in some cases, similar swellings about the wrists, ankles, and the nose, the characteristic pale and earthy colour of the skin, the emaciation, and, lastly, the albuminoid changes, with albuminuria, indigestion, and diarrhœa, which we are in this hospital very apt to associate with the word empyema. A very grave prognosis must therefore always be given in cases of empyema which will not heal, and the question arises as to what, if anything, can be done for their relief. In the first place, a thoroughly free drainage must be obtained either by dilating the original opening or by supplementing it with another in a more favourable position. A second opening alone has often proved sufficient to enable the cavity to close, simply by affording a free exit for discharge; but it does not yet appear that a simple enlargement of the original sinus might not have been sufficient for this purpose. This second opening will often be best made at a higher level than the primary one, for this reason:—it is, as might have been supposed *à priori*, almost invariably the case, that the lower part of the chest cavity is the first to close. This arises partly from the fact that there is only a small space between the diaphragm and the thoracic wall, partly because the structures in the mediastinum can more readily be drawn over in the lower and middle parts of the chest, and partly because the ribs, being larger, can yield more easily, and so assume the modified shape and position that the altered circumstances require. This, as was before stated, is one of the reasons why a very low opening is in most cases to be deprecated, and it will be afterwards seen that in old cases the lower part of the chest can be satisfactorily dealt with, but that the upper part, enclosed as it is by the strong and unyielding upper two ribs, and having but little lung substance on the other side to expand in order to allow the comparatively rigid structures in the upper mediastinum to come over, and, moreover, having probably no lung of its own available, as this has usually sunk down and back near the spine, soon reaches the extreme possible limit of contraction, and, when granulation has done all that it can, often remains as a cavity which defies all that surgery can devise for its closure. The second opening may be made then at any available part, not too far down, and best at a considerable distance from the original one. It is the simplest thing that can be done for an obstinate case, and I have several times seen it successful. But there are many cases in which it is obviously impossible that this should lead to a cure—viz., those in which, although there is a free opening and no accumulation of discharge, there remains a cavity of considerable size. If we suppose a case in which the various walls of this cavity have been drawn in to the utmost possible extent, there is nothing further to trust to, if things be left alone, than the filling in of the cavity by granulations. Now, when this has gone on to a certain extent a degree of tension is established, which effectually prevents a continuation of the process. A state is then reached in which the pleura becomes lined with a perfectly smooth surface—secreting pus indeed, but showing no signs of developing fresh granulations. This is quite analogous to what we see in an ordinary callous ulcer. Here the intense hardness of the surrounding parts establishes a high degree of tension, and therefore the contraction which is essential to the healing process can no longer take place. The result is an ulcer with a hollow base, covered by minute granulations—if they are worthy of the name—of low vitality, and disposed to slough at any slight irritation, rather than to the development of fresh material. In these cases the one essential of treatment is to diminish the tension, which may be accomplished either, as has been often done, by making a circular incision round the ulcer, or by putting the patient to bed and so reducing the chronic œdema, or by applying a blister to the surface of the sore, or by placing an elastic bandage on the limb. To get over the difficulty in the case of the chest, it has been suggested to apply sponge-grafting; that is, to diminish the size of the cavity by filling it with a new material—viz., an organic basis,—which becomes vivified by the migration into it of young cells from the surrounding parts; and it has apparently proved successful in certain circumstances. I have not met with a suitable case to put this in practice. It is essential that the cavity should be in an aseptic condition, which is rare in old cases of empyema. If it be septic, the pieces of sponge introduced soon become putrid, and then not only is it impossible for new cells to find their way into the mass, but this becomes a source of increased irritation to the pleura and of danger to the patient. This was the case in the only patient in whom I tried it, J. H. (Case 4, Table II.). Many pieces of sponge were introduced at different times, but at a subsequent operation they were found unaltered in size, but smelling horribly. To be successful, then, the cavity if septic must first be purified, and then small pieces of sponge, previously decalcified by soaking in a weak solution of nitric acid, must be pushed up to the end of the cavity, and when they are found to adhere to the wall others may be introduced on a subsequent occasion. But it is clear that this method of treatment cannot be of very wide application. To imitate, then, the treatment we apply to a callous ulcer, the only available plan is to diminish the resistance of the chest walls. It was this idea which first led the late Professor J. A. Estlander of Helsingfors to suggest the removal of a considerable length of a variable number of ribs, a suggestion which he first appears to have put in practice in 1877.[1] His patient was twenty-one years old, and the empyema had been opened, apparently not very satisfactorily, eight months previously. He removed 4 centim. of the seventh, 3 centim. of the sixth, and 3 centim. of the fifth ribs through an oblique incision passing upwards and outwards from the fistula. By June 25th of the same year the sinus had completely closed. This was the starting-point of an operation which has been very much practised of late years; which has been much vaunted by some and equally decried by others; which has, I am sure, great merits; but which, because too much has been claimed for it, has often led to disappointment. I will quote, before commencing a description of the operation, a few words from the second of his two articles referred to below to explain his exact position as regards it:—

"It might perhaps be concluded from my article [the first referred to] that, in order to obtain a cure, it is always sufficient to resect once for all from 3 to 6 centim. of several ribs. But this is not what I intended to imply, and is not consistent with the fact. When it is necessary to operate upon a case of chronic empyema, the first essential condition is for the operator to make himself acquainted with the extent of the cavity in all directions. I have been in the habit of using a male urethral bougie, but possibly other instruments may answer the purpose better. After ascertaining the size of the cavity, and in which direction it is most extensive, the operation must be planned upon these data—that is, the largest portion of ribs must be removed at that part where the lung is furthest removed from the thoracic wall. Thus it is not an operation which, when once it has been described, can be repeated exactly; but, on the other hand, the exact steps must depend upon the peculiarities of each individual case; and, as the shape of the chest must be in different cases differently modified, the name of 'thoracoplasty' might well be given to the operation. Nor, again, is it enough, as might be gathered from the cases which were quoted, to do the operation once only. A larger experience has shown me that there are cases where the cavity, after diminishing rapidly as the result of the operation at first, and afterwards more slowly, reaches at last such a stationary condition that no progress is noticed even in the course of months. Under these circumstances the cavity must be again explored and the operation repeated; there may, indeed, be some cases in which even a third operation is necessary. Generally in these secondary operations, which have to be done through the old scars, it is enough to remove a smaller number of ribs, but the portions removed should be at least as long as before."

I can fully endorse these remarks of Professor Estlander, but am not sure that in adults I have yet removed sufficiently long portions of bone to meet the instructions he has laid down. I have never employed it in an adult where a really large cavity remained, because all the patients

[1] Revue Mensuelle de Médecine et de Chirurgie, 1879, pp. 187, 885.

in whom this condition was found presented other symptoms which seemed to render the operation inadvisable. I have, however, removed considerable portions of ribs in adults who had only a small cavity, and also in children with much contracted chests, but a pretty large remnant of the originally completely distended pleura. In all, great benefit has been derived, the cavity and the discharge being much diminished; but I am not sure that I can bring a single instance where a complete closure of the cavity has occurred.

(To be concluded.)

NOTES ON DISEASES OF THE NERVOUS SYSTEM.

By W. R. GOWERS, M.D., F.R.C.P.

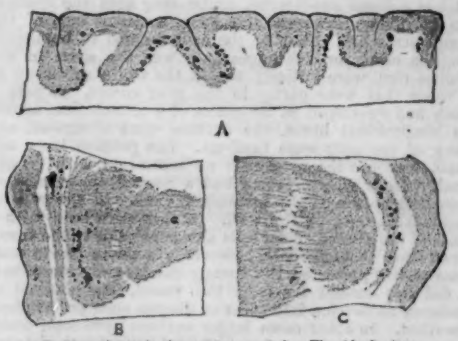
I.

ON A CASE OF MILIARY SCLEROSIS OF THE BRAIN.

THE term "miliary sclerosis" was first applied by Drs. B. Tuke and Rutherford to a lesion found by them in the white substance of an atrophied cerebellar hemisphere in an insane patient. The lesion was chiefly microscopic, was only discovered after hardening, and consisted of minute spots of degeneration, in which there was little evidence of a process deserving to be called "sclerosis." The term was subsequently used by others to designate another microscopic lesion, since abundantly proved to be of artificial origin—an "artefact," as the Americans say. It is questionable whether the term "miliary" ought to be applied to a purely microscopic lesion. It is derived from that classical standard of size, a millet-seed (milium), and may with advantage be restricted to lesions not differing much in dimensions from the grey granulations of tubercle, to which the word is universally applied. Since the demonstration of the spurious nature of the lesion generally designated by this term the expression has fallen into disuse. I venture, however, to revive it as a designation for the lesion in the following case, not only because it accurately describes the morbid state, but also because it is the only term that does so, and the character of the morbid state is the only one which the term accurately connates. The case was observed several years ago, but temporary loss of the notes has prevented its earlier publication. They are unfortunately deficient in many particulars, but the case has at least the interest of extreme rarity.

The patient was a well-built man, aged fifty-nine, seen in consultation with Mr. E. C. Shoppee of Kentish Town, who kindly furnished me with some particulars of the early history of the case. The patient had had syphilis many years before. Recently, slight dyspeptic troubles occurred, and shortness of breath distressed him, which was found to be due to emphysema of the lungs and cardiac weakness. Six months before death his liver and spleen enlarged, and some ascites and anasarca appeared, the urine being free from albumen. Then his limbs gradually became weak, so that, at the end of about six weeks he needed help to walk across the room. He had difficulty in raising his arms. The elbows were flexed and rigid. The weakness increased to complete loss of power about two months after the onset. I then saw him with Mr. Shoppee and found the following condition. He presented no indication of mental change. The cranial nerves and special senses were normal, and the fundus oculi healthy. There was no difficulty in swallowing. The arms were completely paralysed, but very rigid, the elbows being flexed at a right angle. The fingers were flexed at the middle joints, as in hemiplegic rigidity. The legs were also completely paralysed. In neither arms nor legs was there any loss of sensation. The sphincters were competent. During the next week consciousness remained unaffected. Both arms became extended and remained so. Some power was recovered in the left arm and leg. A week later he had some twitching in the right leg, and a day or two afterwards he had several slight convulsive attacks, beginning in the left shoulder, affecting the left side and head only, and the arm more than the leg. Soon after these attacks he lost the power of speaking, mumbled in an unintelligible manner, then became comatose, and died a fortnight after I saw him, and about ten weeks after the onset of the nervous symptoms.

Permission could be obtained to examine only the brain. The arachnoid over the convexity was more opaque than normal. At the posterior part of each hemisphere of the cerebellum there was a small submeningeal extravasation. There was no excess of fluid in the ventricles or any large lesion in the brain. Throughout both hemispheres, and in all parts of them, the cortex contained minute reddish-grey spots, at the junction of the grey and white substance. In tint they were a little darker than the darkest grey substance (as that of the corpus striatum). They were more translucent in appearance than the grey matter of the cortex, and they were not depressed below the surface of the section. Their aspect was very like that of the areas of disseminated sclerosis. In size they varied from that of a mustard-seed, or a little larger, to the smallest point visible. Their size and distribution are shown in the accompanying diagram. (Fig. A.) In many places the section showed rows of these spots along the junction of the grey and white substance, festooning the convolutions. Here and there were larger and more irregular areas about an eighth of an inch in diameter, distinctly formed by the coalescence of the smaller spots. Their number is fairly represented in the figure, and they were equally abundant in all parts of the hemispheres. At two spots there was a more considerable change in the white substance of a convolution. One of these was about a square inch in extent on the inner and posterior part of the right occipital lobe. The white substance was mottled with reddish lines, mingled with some diffuse redness, and many grey spots, similar to those elsewhere, were scattered through this area, and



A, Section through the cortex cerebri. The black dots indicate the distribution and size of the spots of sclerosis. B, Section through the left lenticular nucleus and claustrum. C, Ditto right.

between them were spots and lines of yellowish tint, apparently degenerating cerebral substance. The consistence of this area was not diminished. This change did not invade the grey cortex. Another area of precisely similar aspect, but smaller, existed in the highest part of the left ascending frontal convolution, but also limited to the white substance. In the neighbourhood of this area the grey spots were especially numerous. The rest of the white substance of the hemispheres presented no abnormal appearance, but spots of grey degeneration, identical in aspect with those of the cortex, were numerous in the central ganglia. On the left side the anterior part of the lenticular nucleus was free from them, although they were abundant in the adjacent convolutions of the insula. The claustrum, however, was riddled with similar spots, the size of millet-seeds. In the rest of the lenticular nucleus the two inner segments contained very few, but in the posterior half of the outer segment (Fig. B) they were numerous, grouped chiefly along its outer border, adjacent to the external capsule; none could be seen in the caudate nucleus. In the centre of the optic thalamus was a rather larger spot of similar character; around this were many small spots like those elsewhere, some coalescing. In the right lenticular nucleus were similar spots, but fewer in number. The anterior extremity was free. In the outer segment was a larger irregular spot, one-sixth of an inch in diameter, apparently formed by coalescence. The claustrum (Fig. C) on this side also contained many; the caudate nucleus was free; many were scattered through the optic thalamus, all small. Beneath the corpora quadrige-

mina were two small spots. In the rest of the pons, medulla, crura cerebri, and cerebellum none could be found.

On microscopical examination (of sections, stained and unstained, kindly prepared for me by my colleague, Dr. Beevor) the affected patches were as distinct as to the naked eye. In addition many smaller areas were seen, too minute to be visible to the naked eye, but as well defined as the larger ones. All presented the same characteristics. At the periphery of the larger areas, and throughout the smaller ones, the change consisted of small round or oval cavities separated by septa, which had an indistinctly fibrous appearance, and were dotted with minute granule-like nuclei. The cavities in unstained sections were seen to contain clear or faintly granular material; in stained sections they appeared empty. The cavities varied much in size, some being very small, others larger, and they seemed to communicate. This vacuolated structure bore considerable resemblance to that of a sponge. Passing from the periphery towards the centre of the area, the substance between the cavities increased in thickness and in its fibrous aspect. In the normal tissue near the patches were seen spider cells with conspicuous processes. Similar cells became more numerous within the margin of the diseased area; these were, however, larger, with conspicuous nuclei, but with less distinct processes, some of which could be traced a short distance in the fibrous septa. Towards the centre these cells were still more numerous, larger, with larger nuclei. Smaller, rounded, nucleated cells were seen here and there within the cavities. The increased number of cells and thicker septa gave the centre of the patches a dense appearance, contrasting with the sponge-like periphery. The smallest spots consisted only of the spongy structure. None of the cells seemed to be altered ganglion cells, for the appearance was the same in the patches that were entirely within the white substance as in those that were partly in the grey cortex. Where a patch had developed in the centre of a convolution, among the longitudinal fibres, the cavities were elongated, and many of the cells were fusiform. The patches, large and small, had for the most part no connexion with vessels. Small vessels seen in some had a normal appearance, or presented only a slight increase of nuclei in the wall or slight thickening of the wall. A few were seen with a series of the altered spider cells along each side of the vessel. Away from these patches, however, the tissue beside some some vessels presented the spongy change above described; it did not extend far from the vessel, and showed no tendency to develop into areas of disease such as have been described. In other cases larger cavities were seen beside the vessels, fewer in number, and very irregular in distribution, with thin septa between them and little increase of the cells so conspicuous in the other diseased areas. Similar cavities were seen elsewhere in the white substance near the cortex; some of these had no apparent connexion with vessels, but others were arranged in lines as if indicating the course of vessels that did not come into the section. The grey cortex, apart from the areas of disease, had a normal appearance, and its ganglion cells showed no indication of degeneration.

The lesion in this case seems fairly to merit the term "sclerosis." Its naked-eye characters resembled perfectly those of insular sclerosis, and the microscopical characters are not inconsistent with the term. There was a wasting of the cerebral tissue, and an increase of fibrous tissue and glia-cells. It differed from insular sclerosis in size, seat, and multiplicity of the foci of disease. I have met with no recorded case of quite similar characters. It is, however, clearly allied to the changes that have been met with in rare cases of general paralysis of the insane. In a case of the latter disease, recorded by Dr. F. Greiff,[1] a lesion is described similar in size and seat, except that the central ganglia were unaffected. It differs in that the lesion was invisible in the fresh brain, and consisted in a "vitreous degeneration" of the cerebral tissue and cortical cells, starting everywhere from the vessels, and similar in character to a slighter lesion described by Simon in Bd. ii. of the same *Archiv*. I could discover no trace of a vitreous change in the case now described, unless the process of vacuolation be so described; but a partial relation to the vessels was distinct, and it is possible that the two cases present varieties of the same lesion. The peculiar localisation of the disease suggests a relation to vascular supply, although not necessarily a vascular origin. From all recorded instances of analogous lesions this case is distinguished by the sanity of the patient. Until the final coma there was no mental alteration. It is, then, of much interest as an example of a form of disseminated disease of the deeper cortical layer of the brain, and of the central ganglia, occurring apart from any form of insanity. The absence of an examination of the cord makes it impossible to refer the symptoms in the limbs, with certainty, to the cerebral lesion. It is, noteworthy, however, that in the case described by Greiff a similar rigidity was present.

Queen Anne-street, W.

[1] Archiv f. Psychiatrie, Bd. xiv., p. 287.

THE FAMILY HISTORY OF CANCER PATIENTS.

By W. ROGER WILLIAMS, F.R.C.S.,
SURGICAL REGISTRAR TO THE MIDDLESEX HOSPITAL, SURGEON TO THE WESTERN GENERAL DISPENSARY.

IN treating of this subject, some knowledge of the principles of biology and the laws of inheritance, as applied to the whole organic world, is absolutely necessary. I take it that lack of this knowledge is the chief cause of the recent epidemic of disbelief in the heredity of cancer, which is totally at variance with all that we know of these principles and laws. Therefore I propose to preface this account of my investigations into the family history of cancer patients with a brief general statement as to the nature and laws of heredity, as bearing on this subject.

In ultimate analysis it appears that reproduction is nothing but growth of the organism beyond its individual limit of size. We see this in the amœba, which reproduces itself by simple division. In every act of propagation a certain quantity of cell substance is transmitted from the parents to the child, and along with it the molecular motion peculiar to the parental individuals. The phenomena of inheritance are essentially dependent upon this material continuity and partial identity of the producing and produced organisms. The child is really flesh and blood of its parents. That the main structural characters of all organic beings are inherited is indeed universally admitted, and most naturalists are now agreed that even the smaller morphological details are similarly transmitted. Moreover, not only are those structures which have been inherited from ancestors transmitted to descendants, but also those peculiar variations which have been acquired during the lifetime of the individual. Examples of this are seen in plants and animals—e.g., copper beeches, weeping willows, supernumerary digits, &c. Indeed, it has been established as a general rule that any structure which has once varied in a particular way is henceforth more liable to take on that action again. Now, cancers and tumours must be regarded as morphological variations, and as such they are subject to these laws. On this subject Darwin remarks: "When amongst individuals, apparently exposed to the same conditions, any very rare deviation, due to some extraordinary combination of circumstances, appears in the parent—say once amongst several million individuals,—and it reappears in the child, the mere doctrine of chances almost compels us to attribute its reappearance to inheritance. Everyone must have heard of cases of albinism, prickly skin, hairy bodies, &c., appearing in several members of the same family. If strange and rare deviations of structure are really inherited, less strange and common deviations may be freely admitted to be inheritable. Perhaps the correct way of viewing the whole subject would be to look at the inheritance of every character whatever as the rule, and non-inheritance as the anomaly."

I trust that in these few brief remarks I have succeeded in making my views as to the heredity of cancer intelligible. I will now proceed to state the facts elicited by the analysis of the family history of 254 cases of uterine and breast cancer under treatment at the Middlesex Hospital during the years 1882, 1883, and 1884.

I. UTERINE CANCER (119 Cases).

The fathers.—Of 100 cases in which inquiries were made, in 86 the fathers were dead, and in 14 still alive. Their average age at death in 81 cases was fifty-nine years, the youngest twenty-six, the oldest ninety-five; 7 attained or exceeded the age of eighty; 12 died at or under forty. Of

those still alive, in 10 cases the average age was seventy-three years, the youngest sixty, the oldest eighty-two. They had died of, or were subject to, the following diseases:

Lung disease in 31 cases (31 per cent.): phthisis, 20; bronchitis, 7; others, 4.
Neuroses in 9 cases (9 per cent.): apoplexy, 5; insanity, 2; others, 2.
Heart disease in 3 cases.
Zymotics in 3 cases: typhoid fever, 2; "fever," 1.
Dropsy in 2 cases.
Rheumatic fever in 1 case.
Gout in 1 case.

Four of the fathers who had died of causes other than phthisis were, however, of phthisical families. Thus, of these 100 fathers, 24 were of decidedly phthisical families. There was not a single instance of cancer among the fathers, but 4 of them were of decidedly cancerous families. In 30 cases the causes of death were unknown.

The mothers.—Of 98 cases in which inquiries were made, in 80 the mothers were dead, and in 18 still alive. Their average age at death in 76 cases was sixty years, the youngest twenty-five, the oldest ninety-three; 10 died at or under forty; 9 attained or exceeded eighty. Of those still alive, in 15 cases the average age was seventy years, the youngest fifty-five, the oldest ninety. They had died of, or were subject to, the following diseases:—

Lung disease in 21 cases (21·4 per cent.): phthisis, 12; bronchitis, 8; pleurisy, 1.
Neuroses in 10 cases (10 per cent.): apoplexy, 9; epilepsy, 1.
Cancer in 8 cases.
Dropsy in 4 „
Zymotics in 4 „
Heart disease in 3 „

Five of the mothers who had died of causes other than phthisis were, however, of phthisical families. Thus, of these 98 mothers, 17 were of decidedly phthisical families. Eight of the mothers died of cancer, and in 5 cases, though the mothers had not died of this disease, they were of cancerous families. Thus, of these 98 mothers, 13 were of decidedly cancerous families. In 25 cases the causes of death were unknown.

Consanguinity in parents.—As to this, inquiries were made in 20 cases. In 1 only were the patients blood relatives; in this case they were first cousins; there was no history of cancer or phthisis in either parent.

The patients' brothers and sisters.—In 56 families, one or more of the adult members had died of, or were subject to, the following diseases:—

Lung disease in 35 families: phthisis, 33; others, 2.
Cancer in 6 „
Zymotics in 6 „ typhoid fever, 2; scarlet fever, 2; others, 2.
Dropsy in 5 families.
Neuroses in 4 families: insanity, 2; apoplexy, 1; brain disease, 1.
Heart disease in 4 families.
Scrofulous affections in 3 families.

Of the families in which phthisis prevailed, more than a single member had died of it in 15. The number of members in each family was noted in 92 cases, with the result that the smallest family consisted of 1 (3 instances), the largest of 18 (in 2 instances), the average being 7·5.

The occurrence of cancer.—Of 108 families in which this particular was specially investigated, there was a history of malignant disease in 23 families (21·3 per cent.); in 2 cases there was a history of non-malignant tumours. The relatives affected with cancer and the seats of the disease may be shown as follows:—

Father's sisters (in 2 families): stomach, 1; face, 1.
Father's brothers (in 2 families): uterus, 1; arm, 1.
Father's cousins (in 1 family): breast, 1; neck, 1; foot, 1.
Mother's mother (in 1 family): uterus, 1.
Mothers (in 6 families): uterus, 2; breast, 2; stomach, 1; face, 1.
Mother's sisters (in 6 families): uterus, 2; breast, 2; not stated, 2; intestine, 1; abdomen, 1.
Patient's brother (in 1 family): stomach, 1.
Patient's sister (in 6 families): uterus, 5; breast, 1.
Patient's daughter (in 1 family): uterus, 1.

In one case the patient's maternal grandmother, mother, mother's sister, and patient's two sisters, all died of cancer of the uterus. These 30 seats of the disease may be grouped thus:—Uterus, 12; breast, 6; stomach, 3; face, 2; all others, 7.

The occurrence of phthisis.—Of 101 families, one or more relatives had died or were the subjects of phthisis in 49, or 48·5 per cent. In 45 families more than a single relative had suffered from this disease. The relatives thus affected may be classed as follows:—

Father's father	in 1 family.
Fathers	in 17 families.
Father's brothers and sisters	in 14 „
Mothers	in 10 „
Mother's brothers and sisters	in 7 „
Patient's brothers and sisters	in 34 „

The combination of cancer and phthisis.—Of 101 families there was a history of both phthisis and cancer in 10. Thus:

Phthisis	Father's side in 5 cases.
	Mother's side in 1 case.
	Patient's brothers and sisters in 4 cases.
Cancer	Father's side in 1 case.
	Mother's side in 4 cases.
	Patient's brothers and sisters in 1 case.
Cancer & phthisis	Father's side in 1 case.
	Mother's side in 3 cases.

II. BREAST CANCER (135 Cases).

The fathers.—Of 108 cases, in 99 the fathers were dead, and in 9 still alive. Their average age at death, in 94 cases, was 62·5 years; the youngest thirty, the oldest ninety-three; 13 attained or exceeded the age of eighty. Of those still alive, in 7 cases the average age was 71·2 years; the youngest sixty, the oldest eighty-six. They had died of, or were subject to, the following diseases:—

Lung disease in 27 cases (25 per cent.): phthisis, 20; bronchitis, 7
Neuroses in 10 cases (9·2 per cent.): apoplexy, 7; insanity, 2; cerebral softening, 1.
Heart disease in 10 cases (9·2 per cent.).
Zymotics in 6 cases (5·5 per cent.): cholera, 2; others, 4.
Cancer in 4 cases (3·7 per cent.).
Dropsy in 4 „ (3·7 per cent.).
Old age in 3 „
Diabetes in 1 case.
Ulcer of leg in 1 „
White swelling of knee in 1 „
Chronic rheumatism in 1 „

Twelve of the fathers who had died of diseases other than phthisis were, however, of phthisical families. Thus, of these 108 fathers, 32 (29·6 per cent.) were of decidedly phthisical families. There were 4 deaths from cancer among the fathers, and in 7 other cases, though they had not died of cancer, they were of cancerous families. Thus, of these 108 fathers, 11 (10·1 per cent.) were of decidedly cancerous families. In 31 cases the causes of death were unknown.

The mothers.—Of 105 cases, in 89 the mothers were dead, and in 16 still alive. Their average age at death in 88 cases was 62·5 years; the youngest twenty-five, the oldest ninety-nine years and nine months. Of those still alive, in 12 cases the average age was 71·7 years; the youngest sixty, the oldest eighty-four. They had died of, or were subject to, the following diseases:—

Lung disease in 25 cases (23·8 per cent.): phthisis, 16; bronchitis, 5; pneumonia, 3.
Neuroses in 7 cases (6·6 per cent.): apoplexy, 6.
Dropsy in 7 „ (6·6 per cent.).
Cancer in 5 „ (4·7 per cent.).
Zymotics in 3 „ (2·8 per cent.): cholera, 2; typhoid, 1.
Liver disease in 3 cases (2·8 per cent.).
Diabetes in 1 case.
Spinal disease in 1 „
Heart disease in 1 „
Inflammation of bowels in 1 „

Five of the mothers who had died of causes other than phthisis were, however, of phthisical families. Thus, of these 105 mothers, 21 (20 per cent.) were of decidedly phthisical families. Five of the mothers died of cancer,

and in 11 cases, though the mothers had not died of cancer, they were of cancerous families. Thus, of these 105 mothers, 16 (15·2 per cent.) were of decidedly cancerous families. In 31 cases the causes of death were unknown.

Consanguinity in the parents.—Of 18 cases in which inquiries were made, there was a history of consanguinity in the parents in 3. In 1 case the parents were first cousins. The father died of phthisis, and the paternal grandmother of cancer of breast. In the other 2 cases the parents were second or third cousins. In one of these cases the father died of phthisis, and his mother of cancer of the breast; in the other there was no history of cancer or phthisis, but the father's father died insane.

The patient's brothers and sisters.—In 75 families, one or more of the adult members had died of, or were subject to, the following diseases:—

Lung disease in 37 families: phthisis, 33; bronchitis, 2; others, 2.
Zymotics in 10 families: typhoid fever, 3; smallpox, 2; others, 5.
Heart disease in 7 cases.
Dropsy in 5 „
Cancer in 4 „
Neuroses in 4 „ apoplexy, 3; cerebral softening, 1.
Scrofulous diseases in 3 „
Rheumatic fever in 1 case.
Diabetes in 1 „
Inflammation of bowels in 1 „

Of the families in which phthisis prevailed, more than a single member had died of it in 13. Of 90 families the average number of members was 8·5, the smallest 1 (single instance), the largest 17 (2 instances).

The occurrence of cancer.—Of 114 families, there was a history of cancer in 28, or in 24·5 per cent. The relatives thus affected and the seats of the disease may be shown as follows:—

Father's grandfather (in 1 family): nose.
Father's grandmother (in 1 family): breast.
Fathers (in 4 families): breast, lip, hand, internal.
Father's sisters (in 10 families): breast (5), mouth, internal, liver, face, scalp.
Mother's grandmother (in 2 families): breast, uterus.
Mothers (in 6 families): breast, uterus, tongue, internal; not stated, 2.
Mother's sisters (in 5 families): breast (4), internal.
Mother's brother (in 1 family): groin.
Sister of mother's father (in 1 family): breast.
Female cousin on mother's side (in 2 families): breast; not stated.
Patient's sisters (in 4 families): breast, 3; not stated, 1.
Patient's brothers (in 2 families): throat, back.
Patient's daughter (in 1 family): internal.

In 3 cases there was a history of cancer in the families of both parents. In 6 cases more than a single relative was affected. These 40 seats of disease may be grouped thus:—Breast, 18; "internal," 16; uterus, 2; all others, 13.

The occurrence of phthisis.—Of 112 families, one or more relatives had died or were the subjects of phthisis in 65, or 58 per cent. In 30 families more than a single relative had died of this disease. The relatives thus affected may be classed as follows:—

Both paternal grandparents in 1 family.
Paternal grandmother in 1 „
Both parents in 5 families.
Fathers in 14 „
Father's brothers and sisters in 17 „
Mothers in 11 „
Mother's brothers and sisters in 7 „
Patient's brothers and sisters in 32 „

The combination of phthisis and cancer.—Of 112 families, in 15 there was history of both phthisis and cancer. Thus:

Phthisis	Father's side	in 9 families.
	Mother's side	in 1 family.
	Patient's brothers and sisters	in 2 families.
Cancer	Father's side	in 1 family.
	Mother's side	in 10 families.
	Patient's brothers and sisters	in 2 „
Cancer & phthisis	Father's side	in 2 „
	Mother's side	in 3 „

THEORY OF CANCEROUS INHERITANCE.[1]

By H. PERCY DUNN, F.R.C.S.,
ASSISTANT OPHTHALMIC SURGEON AND PATHOLOGIST AT THE WEST LONDON HOSPITAL.

"As the births of living creatures," wrote Bacon in 1625, "at first are ill-shapen, so are all innovations which are the births of time." This, I venture to believe, is true in its application to the subject which it is my intention now to discuss. I believe that the pregnancy, so to speak, of the non-identity of cancer with heredity has begun, that the metaphorical embryo is satisfactorily developing, that time will enable us to chronicle a new birth in the history of a foul disease, and that in the future we shall be able to show unequivocally that there is no such thing as the hereditary transmission of cancer; and the facts, in my opinion, are accumulating to this end. What, if we cannot show directly that cancer is not hereditary, can the surgeon hope for from operative treatment? What more than despair can the suffering patient exhibit whose disease has been pronounced to be hereditary by the attending surgeon? These are matters to us confessedly of the greatest importance. When therefore we calmly weigh the direful results to which cancer as a disease gives rise, upon the grounds even of humanity, it is right that each particle of evidence bearing upon its supposed hereditary transmission should be sifted and exposed to the ptyalinistic effect of scientific research for the purpose of proving its value.

And now cancer is said to be hereditary—upon what grounds? The laws governing inheritance, as Darwin observes in the "Origin of Species," are for the most part unknown. It is impossible to say why the inheritance of family characteristics should be limited by age, sex, and conditions of life; and it is still more difficult to understand why in some instances a child, instead of inheriting the peculiarities of its parents, should resemble its uncle or aunt, grandfather or grandmother, or some ancestor even still more remote. It has been well said by La Place that the "surest method we can adopt for our guidance in the search after truth consists in raising phenomena by induction to laws and laws to facts," and it is conceivable that the adoption of this principle is admirably adapted for an inquiry which relatively is so obscure as the hereditary transmission of natural or morbid peculiarities. Heredity, nevertheless, is, as is well known, operative as a fixed principle in accordance with three definite and unvarying laws. There is, in the first place, direct heredity, where some peculiarity is transmitted immediately from the parent to the offspring; then we have indirect heredity, where the peculiarity is derived from an uncle or aunt; lastly, there is atavic heredity, where a child inherits some striking feature peculiar to its grandfather or grandmother, or which has been known to belong to some remote ancestor. Now, cancer is held to be hereditary because the disease has occurred consecutively amongst the members of certain families, and because its occurrence has been considered to be consonant with the principle of the hereditary transmission of structural peculiarities. Sir James Paget has observed—and I must apologise here for introducing his well-known statistics—that amongst the cancerous patients whom he saw at the hospital, one in six could give a family history of cancer. In the course of time he made similar inquiries amongst his private patients, and he then deduced the fact that one person out of every three who came to him with cancerous disease had knowledge of the previous manifestation of cancer in the family. With this record, unsupported as it may be by collateral facts, we stand thus: that cancer is apparently hereditary, and not only hereditary, but hereditary to a high degree. The evidence disclosed by these facts concisely expresses the grounds upon which cancer is considered to be hereditary, and, dealing with the question in a general sense, I will now proceed to state the reasons which impel me to dispute the conclusions to which statistics of this nature are calculated to lead.

In the first place, it is essential again to refer to the fact that the theory of cancerous inheritance is based simply and solely upon the consecutive appearance of the disease

[1] A paper read at the meeting of the West London Medico-Chirurgical Society on Nov. 6th.

in certain families. Apart from and beyond this peculiarity it fulfils in no sense whatever the characters of an hereditary disease. "Heredity," says Quatrefages, "which is essentially a preserving agent, becomes an agent of variation when it transmits and accumulates the modifying actions of the conditions of life."[2] Does cancer, I may ask, become an agent of variation? Do the conditions of life which we believe to be favourable to the production of the disease in any way impress themselves upon the human offspring sufficiently to enable us to recognise any influence of heredity in their appearance? Is there such a thing as a cancerous diathesis, equivalent to what we understand by the gouty diathesis, the tubercular, or the syphilitic? Occasionally a child is born whose parent before lactation is completed becomes the subject of cancer of the breast. Now here, in the midst of a disease which is active, is it not natural to expect some impress of it, if nothing more, to be visible in the offspring? But are we able to say, Here is a child who will become cancerous, or because the child's parent was cancerous therefore it will suffer in this way or that? No; a child inherits no pains or penalties from a cancerous parent. It possesses no special, pathological, or structural features which might have come to be regarded as pathognomonic of cancerous disease. It does not necessarily exhibit any ill-health or differ in any respect from a healthy child born of healthy parents. And what is true of the child is true also of the adult. Therefore the conclusion seems obvious and indisputable that, whilst syphilis, gout, and tuberculosis, which are correctly described as constitutional diseases, permanently modify the structure and functions of the body, cancer cannot be included in this category, for, commencing as a local disease, its effects, it is true to say, are never transmitted. A man may be gouty without having had an attack of gout, the origin of his gout having been hereditary. A man may suffer from the effects of inherited tuberculosis without being actually tubercular. A child may be syphilitic in its face, in its teeth, in its eyes, without being actively syphilitic, the disease having been derived by inheritance and remedied at the time by treatment. These are examples of diseases which are unquestionably hereditary; and in the case of cancer, assuming it to be hereditary, analogy would lead us to expect a similar condition of things to prevail. But no. There is no such thing—even in the most recent text-books on medicine—as, say, a cancerous stomach, a cancerous neuralgia, a cancerous ache or pain, without cancer. A person is either cancerous or he is not, and he is not so until he becomes so by exhibiting unequivocally in some organ or part the disease in its primary form. It is clear, then, that if he has inherited cancer he has not inherited much. For, obviously, cancer must be an exceptionally benign disease—before it becomes cancer—in those cases, indeed, in which it is believed to be inherited. For a man with an inherited cancerous taint must patiently wait until the near approach of the last scene of all which ends his strange eventful history, before his morbid patrimony can become an accomplished fact. Now there is something here which calls for special comment. Either the man is exceedingly accommodating for being good enough to wait, or the disease is to be specially commended for exercising such patience. It is pleasant to be able to record this fact. The disease exhibits a feature here which enables us to assign to it even a personality which is worthy of example. Sometimes, however, man frets it into activity before its time by smoking clay pipes and rummaging about in soot. But then, in these cases, of course he has only himself to blame. Those of us who are convinced that cancer is hereditary must unquestionably admit that, to use a commonplace phrase, the disease is generally called upon "to play a waiting game." But is this belief scientific—is it philosophical? I hold that it is not so.

Now it will appear plain from all these remarks that I emphatically oppose the belief in the hereditary transmission of cancer. Well, this is precisely the case. I deny unconditionally, upon grounds which seem to me to be incontrovertible, that the theory is tenable. In other words, to formulate my opinion, I hold that cancer as a disease is never transmitted. But, if cancer as a disease is not hereditary, in what manner can the occurrence of consecutive cases of the disease in certain families be explained? It is possible to reply to this in two or three ways, and the first which I will consider here is that of predisposition.

[2] "The Human Species," International Scientific Series, vol. xxvi., p. 258.

Now I am not sure that it is not impossible to inherit a predisposition to cancerous disease. It may be that parents are able to transmit to their offspring a predisposition to cancer. But what is the inheritance of a predisposition in comparison with the inheritance of a disease? They are two vastly different things. The one can be made to perish by rendering the surroundings inimical to its existence; the other is a reality, an unalterable fate. It is by no means true universally that heredity implies simply a tendency to this or that disease.[3] Does the new-born infant of syphilitic parents inherit simply a tendency to syphilis when its wizen appearance, its scaly eruption, the gross display of colour on its nates betoken the active transmission of its parent's disease? Such an infant, if it survived, would in after-years—nay, indeed, throughout life—display to the observant surgeon, not the tendency which had come to it by inheritance, but the fate to which it had been born. Now what is predisposition, resolved into its simplest terms and reduced to a definition founded upon scientific fact? It is almost impossible to define it. Presumably it implies some transmitted functional insufficiency of organs as a whole or of tissues as a part. There need not probably be any particular structural departure from normal growth, but conceivably simply a diminution of vitality, an inherent want of power in some organ or part which has followed as the result of particular or general disease in the parent. Analogically, perhaps, predisposition may be described as the shadow of a disease, as a disease without its substance—the reflection, as it were, in the offspring, distinct from the repetition, of the morbid types common to one or both parents. It is, however, impossible to generalise, except to a very small extent, in matters relating to the hereditary transmission of morbid peculiarities; and consequently conjecture carried further in this direction would be more prone than otherwise to lead us into error. Common experience has taught us the power we possess of causing the inherited tendency to a disease to subside by adopting certain measures of precaution which are known to be inimical to its existence. This fact is too well known to require more than simply mentioning; but it is not possible to over-estimate its importance, and I will here briefly refer to its application in regard to cancer. It is indisputable that if we admit categorically that cancer as a disease is not transmitted, there is some reasonable hope for believing that some check could be placed upon it by turning attention to the causes and conditions with which it invariably seems to be associated. The strongest element undoubtedly in the production of cancer is age. With this of course we could not deal. But even the most favourable age, together with, if you will, the strongest family history of cancer, would, I firmly believe, not be sufficient to provoke the disease without some extraneous condition, which perhaps should be described as an exciting cause. And in relation to the various causes and conditions with which cancer is allied we have now an accumulation of facts, some of which up to the present are certain, and the rest reasonably possible. Statistics to which I have elsewhere drawn attention have unmistakably shown that the geographical area within which these islands is included is highly favourable to the disease.[4] Upon these grounds, therefore, it is evident that the prevalence of cancer amongst us depends primarily more or less upon this fact. Cancer, therefore, in England should be regarded as a racial disease, as distinct from a disease of the individual. By virtue of the climatic surroundings of England it is probable that English people as a race are inherently much more liable to cancer than the inhabitants of, say, the Faroe Islands and Iceland, in which the disease is said to be unknown. This susceptibility undeniably forms a part of the national family likeness. It has its counterpart, to name only a single example, in the immunity from yellow fever enjoyed by negroes and their half-breeds. Thus, regarded in this light, the predisposition to cancer in England being racial in its origin, and not individual, the primary origin of the disease in the large majority of persons who suffer from cancer amongst whom no family history of cancer can be traced, may be in some respects explained. And perhaps it would be expedient for those families in whom cancer has appeared more than once to emigrate to some Elysian district in the world where the

[3] British Medical Journal, Sept. 26th, p. 607.

[4] An Inquiry into the Causes of the Increase of Cancer (British Medical Journal, April, 1883).

disease is unknown. If this should be ineffectual something different could be tried. Cancer leaves savages alone—that is, uncivilised men and women. To return to a primeval condition would certainly in these days be a novelty, and I commend the suggestion to those who are in search of such things. It would have some advantages, and might prove popular for a time; but it is doubtful whether the wild man would appreciate the experiment or reciprocate the feeling of gratification of which all things novel become the source.

I will now briefly discuss the relation of cancer in regard to the social position of the patients. What do we learn? Taking Gross's statistics as an example, we find that out of 712 women with cancer of the breast, 88·22 per cent. were or had been married. Of these, 83·91 per cent. had borne children and 16·09 were sterile, while 11·77 were single. What a remarkable statement is this! We are here again brought face to face with the astounding influence exercised by fecundity upon cancer. It is almost certain that if every virgin in England at this moment maintained her *status quo ante* in this respect until the end of her natural life the female mortality from cancer in the future would be infinitesimal in comparison with present records. The question of marriage is thus an eminently important one in relation to cancer as far as the female is concerned, and yet it is one obviously far beyond the influence of politicians, moralists, or surgeons.

Let me now, however, draw attention to the somewhat remarkable fact that in those families whose cancerous history has been quoted as evidence of the hereditary theory, the disease has almost invariably been transmitted in the female line. I say almost invariably, because of course there are exceptions to every rule. Thus in Warren's case, in Paget's, in Velpeau's, in Broca's, the female members of the families concerned predominently—almost entirely—suffered from the disease. Before, however, determining the question of hereditary transmission in these cases, it is perhaps as well to take into consideration certain factors which it is scarcely possible to overlook. For instance, we know that cancer as a disease is not limited in its appearance to one sex. It is true that it is more common in women than in men, but the truth of this only extends as far as the fact that women possess a uterus and functionally active breasts, for both of which organs the disease exhibits a marked predilection. In short, then, assuming the disease to be hereditary, it should be transmitted equally to both sexes, and not expend its virulence upon the female line alone. Again, all women who have borne children are liable to cancer, as statistics have abundantly shown. Furthermore, the briefest experience of cancer in women is sufficient to reveal the wholesome dread and misgiving with which the disease is regarded, and it is quite comprehensible that the sympathy and mental disturbance excited by a suffering relative succumbing by slow degrees from cancer of some organ might readily become the *fons et origo* of the disease in another member of the family. Thus the inexorable logic of facts compels the conclusion that if cancer can be met with frequently without any hereditary history, heredity can scarcely be regarded as exercising any potential influence in its production, more especially in those cases where other and more important factors are present, with certain of which the disease is always inseparably associated.

In bringing forward these facts and opinions—and I am bound to admit that the latter predominate—I have not endeavoured to exhaust the subject to which they relate; but rather my object has been to extract the most salient features of the case, and appear as a counsel with his brief urging the claims of a client in whom he has more than an ephemeral interest. The advocacy of a cause of this nature involves the discussion of many complex topics; it necessarily deals with problems of science, of which the solution cannot be too frequently essayed; it leads the inquirer into many a cul-de-sac of pathology, from which it is often a difficult matter to effect a graceful retreat. But whether or not we shall ever determine the influence of heredity upon cancer depends confessedly upon whether or not we are prepared to sink the belief which has been bred of unsupported facts, and to struggle onwards patiently seeking and hopefully expecting some gleam of light to disperse the obscurity of the pathology of the disease.

The Sanitary Committee of the Bristol Town Council have adopted Sir J. Bazalgette's recommendation respecting the disposal of the sewage of that city.

ON THE

IMPLICATION OF THE MASTOID BONE IN EAR DISEASE.[1]

BY SIMEON SNELL,

OPHTHALMIC SURGEON TO THE SHEFFIELD GENERAL INFIRMARY AND TO THE INSTITUTION FOR THE BLIND.

AMONG the more important diseases affecting the hearing apparatus must be counted those attacking the mastoid process, occasioning as they do in many cases danger, and giving rise to very proper alarm. In this communication I purpose recording cases from my own practice, which will indicate varieties as to the manner and degree in which the process is affected, and will illustrate also the methods of treatment pursued. It is only rarely that the mastoid process becomes the seat of disease independently of an affection of the middle ear; Mr. Pierce, of Manchester, has, however, recorded[2] an instance in which suppuration in the process occurred without implication of the tympanic cavity; other cases are also reported, but they are far from common. Generally speaking, there is associated disease of the middle ear, either of an acute or frequently of a chronic character.

Discharges from the ear are, it is well known, by no means infrequent; and patients so suffering constitute a good proportion of those seeking treatment in aural cases, and their number would be largely increased if the importance of attention to and the danger of neglecting such cases were recognised. It is high time the old fable that such discharges had better not be stopped be driven out of the heads of the public, opposed as it is to sound surgical teaching. "It is even," says an American aurist,[3] "gravely asserted that such a discharge is salutary, as if our Creator would not have made the human race with such a one if it were necessary." The offensive character of the discharge, which renders him a nuisance to others, is occasionally the reason that induces a patient to seek advice; but, whatever the cause, it is clearly our duty to counsel steady treatment until the ear is in a healthier condition. In conscientiously fulfilling our duties, however, we not uncommonly labour under disadvantages. Patients have been accustomed in many cases to treat the matter with such levity that the frequent consultations or continued attendances are, it would seem, viewed by them as a means to an end, the object being to put fees into the medical man's pocket. It is thus difficult in some cases to keep patients under observation sufficiently long to render all the services of which our art is capable. It is no part of my subject to enter into the various causes of discharges from the ear, nor of the dangers associated with such conditions; but I have dilated thus widely on this matter because of the close connexion between such states and the subject under consideration. A free exit to all tympanic discharges is a matter of the first importance. The late Mr. Hinton observed:[4] "When threatening symptoms declare themselves, such as rigors, with or without ceasing of the discharge, pain in the ear or side of the head, giddiness, fever, or loss of power of any of the muscles, the aim of the treatment is simple—namely, to subdue any newly arisen inflammation, and, above all, to secure a perfectly free exit for pus, wherever it may be. In the vast majority of cases, impeded discharge is, or has been, the primary cause of the evil." The truth of these words will be exemplified in the cases about to be related.

In the first place let me refer to the case of a man, aged about twenty-five, recently under my care. He had been the subject of ear disease for about four years, coming on after picking the left ear with a pin, and injuring, as he was told at the time, the drum. The left meatus was filled with a polypus; and he complained, moreover, of giddiness, pain in the ear, over the mastoid, which was also a little tender, and over the head, and he suffered from sleeplessness. The meatus was cleared of the polypus. The Eustachian tube was pervious, but at first, with Politzer's bag, no air passed externally because the orifice in the tympanum was closed

---

[1] A paper read before the Sheffield Medico-Chirurgical Society.
[2] THE LANCET, 1875, vol. i., p. 11.
[3] Roosa: Treatise on Diseases of the Ear, p. 360.
[4] Questions in Aural Surgery.

by the polypoid condition of the cavity. A little later a large piece of bone from the tympanic wall was removed. Boracic acid lotion was used; and with the re-establishment of a ready exit for pus by the Eustachian tube and external meatus, the symptoms, pain, giddiness, &c., rapidly disappeared, and the discharge ceased.

The next case, also, is an example of involvement of the mastoid, which threatened to be serious, with stoppage of the discharge and subsidence of the symptoms, when exit for the discharge was re-established.

A young girl, aged fifteen, was sent to me by her medical attendant on April 13th, 1883. Her history was briefly this. About two years before she suffered from pain in the left ear, and it is said to have "gathered and burst." In a short time the discharge ceased. About six weeks before coming to me she had sore-throat, and when this had subsided, intense pain again commenced in the ear, which began to discharge, and afterwards ceased. When discharging the ear was free from pain, but directly it stopped the suffering was distracting. It came on in this way, discharging and ceasing five or six times. For some little time there had been swelling behind the ear, and recently it had become worse, and the pain was very severe. She had had very little sleep for three weeks. Examination showed over the mastoid and upper part of the neck a good deal of swelling, not much redness, but it was tender to the touch. There was pus in the ear, but the meatus was so occluded by swelling that a good view far down was impossible. The Eustachian tube was pervious, and the membrana tympani was perforated.

Here let me draw attention to a symptom which is very characteristic of mastoid inflammatory mischief. Allusion is made to the peculiar way in which the external ear loses its manner of lying more or less flat, and stands straighter out, and forms something of a right angle with the head. It should at once attract attention and suggest an examination of the mastoid. Little or no mention is accorded to this condition in books.

To return to our case. It appeared very probable that operative measures might be required, but, in the first place, the following line of treatment was decided upon, and was eminently satisfactory. She was confined to her room; poppy fomentations were frequently applied to the mastoid, and it is believed leeches as well, but the notes do not mention it; boracic acid lotion, warmed, was used for cleansing the ear, the importance of which was duly urged, and inflation with Politzer's bag was employed. A gargle was ordered also for the throat. Under these measures the mastoid swelling and pain rapidly disappeared, and she was soon out of my hands.

Another case under treatment at the same time was very similar to the one just related. There was not, however, in this case the marked obstruction observed in the other, but the mastoid affection subsided under the same treatment.

In April, 1883, a young man came to me. He had suffered in the right (?) ear for two weeks previously—the result, as he thought, of "cold." It commenced as a tickling in the ear, and later on a discharge from the meatus began. Then he suffered from pain behind the ear, which was very severe, and he could not sleep. The pain in the ear had never been of such a character. When seen by me the mastoid was somewhat swollen and puffy, and tender to the touch. Here the same line of treatment was pursued as in the last case. Leeches were applied to the mastoid, a lotion of Condy's fluid was employed for cleansing the ear, and the air douche was used for securing the perviousness of the Eustachian tube. The symptoms speedily subsided.

The instances just related have been those in which the implication of the mastoid has been only slight compared with what in many is the case. The prognosis is favourable, as Politzer[5] says, when there is a sufficiently free escape of secretion from the tympanic cavity and from the external auditory meatus. For this reason cleansing of the ear is an important part of the treatment. Boracic acid is my favourite remedy, but Condy's fluid, carbolic acid, and other agents are serviceable[6]. The tympanum may be cleansed through a catheter in the Eustachian tube, a plan Politzer speaks highly of, but it is out of the question with children. Leeches and fomentations are most valuable; iodine and belladonna locally applied seem also to act well in some cases.

As it has already been said, there are cases in which the symptoms are much more intense than those already referred to. The swelling over the mastoid region may be very great, extending into the head above and into the neck below; and the skin may be reddened, brawny, and œdematous. Moreover, the pain suffered may be of the most intense character, and there may be associated pyrexia, delirium, and other alarming symptoms. The extent and danger of the implication of the mastoid is not, however, in all cases to be measured by the amount of swelling on its surface.

On May 1st, 1882, a middle-aged clergyman from a little distance consulted me, under the following circumstances. Eight weeks previously he awoke one night with "earache," which continued very severe for four or five hours; he noticed a "crack" in the ear, and then a discharge came from it of a very offensive character. Latterly he had suffered from throbbing over the mastoid and side of the head. At the time of his visit there was no discharge from the ear, and the membrana tympani had healed. A watch (hearing distance forty inches) was heard only in contact; the Eustachian tube was pervious, but hearing was not improved after the passage of a catheter. There was no appreciable swelling over the mastoid, but firm pressure elicited a little tenderness. I communicated with his medical attendant, expressing the opinion that there had been suppuration in the tympanum, that there had been extension of the disease to the mastoid, and that, if suppuration in the cells had not already taken place, the condition was such that operative interference might at any time be demanded. It was not until May 16th that news of his progress reached me; his medical man, writing at that date, stated that his condition had not improved, but that the mischief in the mastoid cells had extended. On the 17th I visited him, together with his medical attendant and a medical relative. His condition was found to be rather alarming: pain of the most intense character was felt in the mastoid region and head, sleep had been absent, and there were delirium and pyrexia. The mastoid region was much swollen, tense, and brawny, but with only an indistinct feeling of fluctuation; the swelling extended above into the head and below into the neck. It was decided to cut down on to the mastoid, and if necessary to perforate the bone. Accordingly, under ether, a free incision was made behind the ear through the thickened tissues; about a dessertspoonful of pus immediately escaped, and the bone was found eroded and readily gave way. Free poulticing of the wound was advised. No opportunity has occurred of my again seeing the patient; but on the 19th his medical attendant wrote to me, saying that he was doing well, and he ultimately made an excellent recovery.

A somewhat similar case[7] to this I related before the Society a few years ago, and will only make brief reference to it now. The symptoms were just as severe and urgent in a man aged forty as in the one I have just mentioned. On cutting down to the mastoid a little pus escaped, and with a director an opening was found in the bone. The director was pushed further into the mastoid, and the opening was enlarged by levering it about in different directions; pus then freely escaped. He made a rapid recovery.

Recently I have seen with a medical friend the mastoid involved in two little sisters—delicate strumous children. In both the primary tympanic mischief was recent. In the elder, aged five, the swollen and tender mastoid subsided under warm poppy fomentations, cleansing the ear with boracic lotion, and inflation with Politzer's bag, together with a chlorate of potash gargle for the throat. In the younger, aged three, the course was different. She had suffered a little from earache and discharge for a few days, but it was only on January 23rd that she complained of actual pain. The next day this had increased, and my medical friend discovered that the mastoid was implicated. Warm poppy fomentations and boracic acid lotion for the ear was prescribed as in the last case. At our consultation the following day (January 27th) the ear was noticed to be straightened out from the head, and there was considerable swelling and tenderness over the mastoid; there had been rigors and pyrexia, and the child was much upset. Politzer's bag was used and the treatment continued. By the 29th the condition was worse. Under chloroform an incision was made down to the bone; a little pus escaped, and the bone was eroded. Poultices were applied to the wound, which was also syringed with boracic acid lotion; the treat-

[5] Text-book on Diseases of the Ear (English translation), p. 660.

[6] This paper was written some time since, and no mention has been made of the great value of iodoform.

[7] THE LANCET, 1881, vol. i., p. 410.

ment for the ear was continued. The symptoms quickly subsided. I have since heard that a piece of necrosed bone has come away.

Another variety of cases may be unattended with swelling over the mastoid, and these are often among the most serious. The localised pain may be as intense as, or more so than, in any of the foregoing instances, and there may or may not be tenderness on deep pressure. The constitutional disturbance may be great, and whilst suppuration is taking place in the mastoid cells the unhappy state is aggravated by the inability for the imprisoned pus to find a mode of exit. These are among the extremely grave instances of implication of the mastoid, and it would appear not unlikely that the real nature might be overlooked or confounded with meningitis or some cerebral disorder. At all events, they are a class of cases that demand very decided treatment, the importance of which has been urged by Hinton, Dalby, Troeltsch, Politzer, and a host of others. The case next related caused my friend Dr. Martin (with whom I saw the patient) and myself to fear at one time that it would be of the serious nature just indicated, and was one of considerable anxiety.

The patient, a young gentleman of about twenty-three years, was first seen by me in 1877. Twelve years before he had had scarlet fever, and had since suffered from discharges from the ears. Both drums were destroyed; the lining membrane of the right tympanum was villous-looking. The left ear heard the watch on contact, the right at two inches ($\frac{2}{12}$). There was obstruction of both Eustachian tubes. This part of the case may be left with stating that with Politzer's bag and catheter the Eustachian tubes were rendered pervious, and at the end of a month the discharge had ceased, a result which held good when seen again some time later. On Feb. 2nd, 1883, Dr. Martin asked me to see him. He had just recovered from an attack of broncho-pneumonia, and a few days before my visit he had been seized with pain in the right mastoid; this had been of a very severe character, and had occasioned much loss of sleep. Leeches had already been applied with some temporary relief, and so had warm fomentations, and the application also of belladonna extract, with similar benefit. In spite of these remedies, however, and chloral as well, the suffering became aggravated. When I saw him the pain was confined to the mastoid, from which it ran into the jaw, especially the inferior maxillary articulation. It was at times less severe than at other times. There was no swelling to speak of over the mastoid, and only deep pressure elicited tenderness. The discharge from the ear had not been great. The ears were inflated with Politzer's bag, and boracic acid lotion was ordered; otherwise, the local applications were continued, and leeches, from which the patient appeared to have derived some relief, were re-applied. The next day he appeared, if anything, a little relieved; but this proved to be merely a temporary subsidence, for when we met again on the 6th his symptoms were aggravated, and it was decided to do what we had discussed at the outset—viz., cut down over the mastoid on to the bone. This was accordingly done, the patient preferring to have it performed without an anæsthetic. The incision, about an inch and a half in length, was carried through the periosteum; bleeding was encouraged, poultices were applied, and measures were taken to prevent the early closing of the wound. Great relief was immediately experienced, his symptoms soon disappeared, and we had the pleasure of seeing him before long restored to convalescence.

Enough has been said respecting the foregoing cases to indicate the different ways in which the mastoid process may suffer. They have been grouped thus rather than separated into periostitis or suppuration of the mastoid, because in practice the cases run much into each other, and it appeared better to consider the treatment necessary as a whole.

This is not the occasion to refer to the treatment of chronic ear discharges, which is a subject of itself more than long enough to occupy as much space as the present communication. The importance of maintaining a free exit for the discharges both from the Eustachian tube and the auditory meatus has been already urged. If the perforation in the drum-head is very small, it may be well in certain cases to enlarge it. My experience, moreover, with incision of the membrana tympani is such that I am convinced that many membranes which, left alone, would have become perforated or destroyed, have by a timely puncture been restored. It is not often easy to see a case at the best time for the incision, but I think it likely that in scarlet fever especially, if the ear complication is looked for and the membrane incised at the right moment, an exit will be given to the pent-up pus and in many cases the tympanic membrane saved, and this, it may be, at a time when the Eustachian tube is closed by the pharyngeal lesion and Politzerisation is rendered difficult or impossible. In a case of this kind which I saw with a medical man a year or two ago one membrane had perforated and the other seemed on the point of doing so. The latter was incised, and Politzer's bag used, and it was learned afterwards that speedy recovery ensued.

A few words as to the incision over the mastoid—Wilde's incision, as it is called, after the eminent Dublin surgeon. It is an operation generally recognised as of great value. In the last case related it was performed with the previous clear understanding that it was quite probable the mischief was in the interior of the bone, and that it was done to see the benefit the incision alone would render, and to obviate if possible the more serious procedure of opening the mastoid cells. No pus came away, and the beneficial result would appear to have been caused by relieving tension, by opening the periosteum and giving relief to the inflamed bone beneath. In cases in which the mastoid is tender the incision affords benefit. In the instances also mentioned here in which it was used it gave relief either by freeing pus or by giving a means of exit to suppuration in the bone. After making the incision it is a good plan to examine the condition of the bone; it may have already perforated, and the opening may be enlarged with a probe or other means, or it may be thinned and be readily penetrated by the knife. It is an interesting fact, attested by many surgeons, that chronic ear-discharges often cease after the mastoid process has been opened. The aperture, if large enough, is a convenient way for cleansing the tympanum by syringing through the latter. The condition of the mastoid bone itself must materially influence the inflammatory process set up in it. It is well known, for example, that the mastoid is absent in the new-born child, though Politzer in the first years of life has found it as a "considerable blunt protuberance." Then, as to its internal structure, it does not always consist of air-cells, but the interior may be often entirely or in part occupied by an adipose or compact osseous substance. Zuckerkandl[8] has pointed out that, among 250 temporal bones he examined 36·8 per cent. had the mastoid process entirely pneumatic; 43·2 per cent. partly pneumatic and partly like diploë; and in 20 per cent. it was composed of sclerosed osseous tissue. Politzer states that it is impossible to ascertain in a living person the anatomical condition of the mastoid, and it is only at the time of an operation in the process itself that its nature is revealed. Another point of moment is the varying forward position of the sigmoid fossa in which lies the lateral sinus, for this is of great importance in connexion with an operation for perforating the mastoid. Thus "Hartman[9] found in 100 cases, through the variable position of the sigmoid fossa, which appeared to be shifted forward to a considerable extent in many cases, as also through the middle cranial cavity lying lower than usual, the transverse sinus was wounded twice and the middle cranial cavity three times at the opening of the antrum mastoideum from without." In any operation, therefore, it is desirable to keep as far forwards as possible, making the incision at or just behind the attachment of the auricle. Politzer employs a second incision, prolonged backwards from the upper end of the first, forming in this way a flap. The direction subsequently for penetrating the bone and reaching the antrum mastoideum would be inwards, upwards, and forwards. For opening the bone a trephine has been used, and also a chisel, straight and hollow, with mallet, have been employed. I have generally gone to a case provided with these instruments, but I am disposed to adopt a perforator with a stop to regulate the necessary depth, such as Mr. Dalby has recently advocated. Left to themselves, cases of mastoid suppuration may perforate inwardly and set up meningitis, or, through the lateral sinus, thrombosis. At the same time there is a greater tendency to come outwards, and if timely aid is unsought, pus may burrow under the muscles of the head or neck and perforate at some distance. More or less caries often results, but it is not uncommon to see scars on the mastoid, the evidence of former disease, which has been recovered from.

[8] Politzer: Treatise on Diseases of the Ear, p. 549. [9] Ibid., p. 650.

In this practical review of the way the mastoid process becomes implicated many points have been necessarily omitted. Internal medication has thus received no proper notice, and I will only say that I believe sulphide of calcium, which in my hands has been such a satisfactory remedy in strumous ophthalmia,[10] will be found useful in chronic ear affections in scrofulous subjects.

ON A METHOD OF CONTROLLING BLEEDING DURING COMPLETE OR PARTIAL EXCISION OF TONGUE.

BY JORDAN LLOYD, M.B., F.R.C.S.,
SURGEON TO QUEEN'S HOSPITAL, BIRMINGHAM.

I AM not about to inflict on the profession another mode of tongue removal. Too many operations for this purpose have already been devised and executed; several of them doubtless being excellent, and possessing certain advantages in particular cases. From amongst the whole number I should single out Kocher's probably as the best where the entire organ is to be eradicated; and in those very rare cases where unilateral excision only is called for, removal by the mouth with scissors as suggested by Whitehead (after splitting the organ as advised by Morrant Baker) is the plan to which I should give preference. I have no love for cauteries or écraseurs in tongue excision; they so frequently betray us by failing to realise the only advantage which can possibly be claimed for them—viz., the prevention of hæmorrhage. In all operations on the tongue bleeding has been the factor most difficult to combat. I believe that the procedure described below will reduce our trouble from this source to a mere trifle, for when it is properly carried out the tongue may be cut through at its root with knife or scissors without any blood loss whatever. Before attempting this procedure I would invite the surgeon to familiarise himself with the glosso-epiglottidean pouch, by palpation with an index finger introduced into its deepest part and another placed outside between the hyoid bone and the under surfaces of the angles and rami of the lower jaw. It is surprising how little tissue intervenes between the fingers, and how distinctly the various structures in relation to this space can be identified.

Chloroform having been administered, gag the mouth widely open, introduce the left index finger well to the bottom of the glosso-epiglottidean pouch, defining clearly the hyoid bone with its cornua, the front of the epiglottis, and the back of the root of the tongue. Take a stout, long, well-curved needle in handle, threaded with medium-sized whipcord, and enter it from the front of the neck in the middle line immediately above the hyoid bone; feel for the point of the needle with the left finger as the instrument is pushed through the root of the tongue. In this way the epiglottis is protected from injury, and nothing more than the lingual tissues are transfixed. Hook up the loop of thread with the left finger, and pull it well through and out of the mouth. Withdraw the needle, liberate the thread from it, and cut through the loop. Now enter the empty needle at the same point of puncture, through the skin only, and pass it subcutaneously—say to the right—until its point is opposite the upper border of the root of the great cornu. (This step is facilitated by pinching up the skin and pulling it outwards away from the needle.) Care must be taken that the needle runs immediately beneath the skin, so as to be outside and well away from the lingual artery. Now turn the point inwards above the great cornu, so as to enter the bottom of the side of the pouch, the finger having again been introduced to receive the point of the instrument. Thread one of the ends of the cord which is in the mouth through the needle and withdraw. A loop will in this way have been made around the root of the right half of the tongue; its two ends emerging from the median puncture are to be tied tightly enough to control circulation (best ascertained by feeling for the pulsation of the lingual vessel on the under surface of the tongue). A similar proceeding is to be carried out on the left side, and thus the whole tongue will be secured in two separate halves. There is no real difficulty in the operation. The guiding finger in the pouch enables us to recognise all the structures concerned with the greatest confidence and accuracy. The only possible danger is that of passing the needle too far backwards in the second puncture, thus wounding one or other of the carotid arteries. I can only conceive this occurring in careless hands in very thick necks. Instead of entering the needle the second time at the first puncture, the surgeon may, if he chooses, make a fresh puncture altogether, at a point external to and immediately above the root of the great cornu, and may push the needle straight through into the pouch, thus avoiding the subcutaneous manipulation. The encircling ligature will then include the external skin between the points of puncture, which may slough if the ligature is pulled too tight or allowed to remain on too long. I have practised both methods, and have seen no bad effects follow. I have cut through tongues after the application of these ligatures with knife and with scissors, and in all my incisions have been absolutely bloodless. After the tongue is removed and the lingual arteries securely tied, the ligature of one side is to be liberated, and any bleeding points which then appear are to be tied; afterwards the other ligature is to be removed. When the median puncture only is made, as in the first method described, the loops must be cut through from the mouth by passing a blunt-pointed bistoury beneath them where they lie in the pouch. In the second method the loops must be cut through externally over the included skin. It is important to see that the threads are not twisted before beginning the second punctures, otherwise the loops engage the one in the other. This makes no difference to the efficient control of the circulation in both sides of the tongue collectively, but when the time comes to remove the threads the division of one will slacken the other, and thus liberate the smaller vessels in both sides at the same moment.

I first tried the above method on October 20th, 1883, and succeeded in completely removing a cancerous tongue without any loss of blood from the tongue tissue itself. In this case, after my ligatures, I performed Whitehead's operation with scissors. My last case was done a few weeks ago, on a patient sent to me by my friend Mr. T. Law Webb, of Ironbridge. I then removed the whole tongue within half an inch of the hyoid bone, without the loss of a single minim of blood from the lingual tissue until after the removal of the ligatures. So effectively was the circulation controlled that, when the tongue had been liberated from its lateral attachments, I cut it away with a single sweep of a bistoury, the stump remaining as dry as in an amputated limb surrounded with an Esmarch's ligature.

[10] The Practitioner, 1882.

ALBUMINOMETRY AND ESBACH'S TUBES.

BY J. E. BLOMFIELD, B.A. OXON.,
RADCLIFFE TRAVELLING FELLOW.

THE usual method for the quantitative determination of albumen in the urine in the course of clinical work must be regarded by everyone as unsatisfactory. It consists generally, according to my experience, in boiling a test-tube about half filled with the urine, allowing the coagulated albumen to subside, and then getting by sight a rough estimate of the proportion of the albumen to the amount of urine employed, which must necessarily vary with the idea of the proportion according to the observer, where one person would call it an eighth, another would say a tenth, and so on. There is a method used as clinical routine in many of the French hospitals, which is in every way as convenient as this, but which yields results possessed of numeric accuracy, and which serves to give a good idea of the actual amount of albumen a patient is losing by his urine. The method was devised by Dr. Esbach, and consists in the precipitation of the albumen by means of picric acid. After standing twenty-four hours, the precipitated albumen reaches a certain height in the tube, and it is according to height to which it reaches that the amount of albumen is determined. The tube is empirically graduated in such a way that the number to which the precipitate reaches gives directly the grammes of albumen per litre of urine. The reagent for precipitation is made by dissolving ten grammes of picric acid and twenty grammes of citric acid in 800 or 900 c.c. of boiling water, and then adding sufficient water to make one litre. Urine is

poured into the tube up to a certain mark, the reagent added up to another mark, and then the tube is inverted about a dozen times to mingle well the contents, and placed in the vertical position for twenty-four hours, when the height to which the subsided precipitate has reached gives the grammes of albumen per litre. The tubes can be procured for three or four shillings from Brewes Frères, 43, Rue St. André des Arts, Paris.

A Mirror
OF
HOSPITAL PRACTICE,
BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

KING'S COLLEGE HOSPITAL.

COMPOUND FRACTURE OF THE HUMERUS IMPLICATING THE ELBOW-JOINT; RECOVERY WITH USEFUL JOINT; REMARKS.

(Under the care of Sir JOSEPH LISTER, Bart.)

BEFORE the introduction of the system of antiseptic treatment, introduced and perfected by the surgeon having charge of this case, such an injury would most likely have resulted in the loss of the limb. Had the operator, taking into consideration the youth of the patient, attempted to save the arm, as was here done, the amount of dirt ground into the wound would have inevitably caused suppuration in and around the joint. This would have ended either in the performance of secondary amputation or in ankylosis of the elbow, supposing the patient to have escaped the danger of septic absorption to which he would have been exposed. In this case there was no suppuration, no pain during the after-treatment, and the usual movements were restored. The following notes are supplied by Mr. R. C. Priestley, house-surgeon.

James W——, aged sixteen, was admitted into the Victoria ward on August 9th, 1885, suffering from an injury received through his arm being caught between two revolving wheels of a machine. On admission there was found a lacerated wound three or four inches long on the outer side of the elbow-joint. The muscles arising from the outer condyle were exposed and lacerated, and the external condyle was separated from the shaft of the humerus, and lay loose in the wound; the ligaments about the elbow-joint were so much torn that the finger could be introduced between the articular surfaces of the humerus and ulna with ease. The forearm and exposed muscles were begrimed with machine oil, the whole wound being in a terrible state of dirt.

The patient was put under the influence of an anæsthetic about three hours after the accident. Some ordinary soap and carbolic lotion (1 in 20) were then mixed so as to form soapsuds, and the whole wound was thoroughly scrubbed with this by means of a clean nail-brush, until every trace of grease and dirt had disappeared. The fractured external condyle was removed, and loose tags of muscle were snipped off with scissors. The joint was syringed out with carbolic lotion (1 in 20), and a counter-opening was made over the internal condyle, through which a drainage-tube was introduced. No attempt was made to bring the edges of the wound together by sutures or otherwise. The arm was enveloped in an antiseptic dressing, and an angular splint applied. The wound healed without suppuration, and there was absolutely no pain. The temperature was normal, except on one occasion (the eleventh day), when it rose to 100·1°. Passive motion was begun early, and at the end of three weeks the joint permitted all the usual movements. The patient was discharged at the end of five weeks, cured.

Remarks.—The special points of interest attaching to this case are: the apparent hopelessness of trying to render the wound aseptic, owing to the infiltration of so much dirt and greasy material; and the success of the treatment adopted, as shown by the complete restoration of the joint to its usual functions.

BRADFORD INFIRMARY.

FUNCTIONAL DISEASE OF THE HEART; REMARKS.

(Under the care of Dr. H. C. MAJOR.)

FOR the following notes we are indebted to Mr. Eustace G. Carter, house-physician.

Richard B—— was admitted on October 28th (has been an in-patient five times during the last five years, under the late Dr. Tibbits), suffering from the same symptoms as when previously under observation. By occupation a blacksmith. Family history entirely satisfactory. Unmarried; suspicion of sexual excess. Has occasionally been drunk, the last time twelve months ago. Is not an excessive smoker. No history of acute rheumatism or illness of any importance up to five years ago, when he had for the first time an attack similar to the one about to be described, following a "bad cold." Five months ago he had "inflammation of the lungs" and was in bed three weeks, but had no symptoms referable to his heart during that time. He says that in one of the attacks mentioned above he "had swelling of the legs." One month ago a severe bilious attack left him suffering from dyspeptic symptoms—viz., flatulent eructations, acid taste in mouth, &c. Whilst suffering in this way palpitation suddenly set in, but was not worse on exertion; this gradually became more severe, obliging him to discontinue his work.

On admission, he was a fairly well developed young man, with well-marked general cyanosis; eyeballs rather prominent, but no enlargement of the thyroid gland. Dorsal decubitus was present (maintained throughout the attack). His whole body seemed to be shaken by the rapidity of the heart's action. Pulse 144, very weak; respiration 24; temperature normal. Complained of an "aching pain" across the lower part of the thorax. Thorax well formed; skin over præcordial and hepatic regions of a dark-brown colour, from frequent counter-irritation. There was a rapid, regular pulsation over the whole of the præcordial, hepatic, and epigastric regions, without thrill on palpation. Apex-beat of heart diffused, probably in fifth interspace, three inches and a half from the left edge of the sternum. Superficial cardiac dulness measured horizontally, opposite the fourth rib, three inches and a quarter, beginning at the left edge of the sternum; no increase of vertical dulness. On auscultation no bruit could be detected. Lungs clear. Abdomen distended; no bulging in flanks; hyper-resonant note in every area; violent pulsation in epigastrium and at hypochondriac regions. Hepatic dulness increased for about three-quarters of an inch; tongue furred; bowels confined; urine high-coloured, intensely acid, sp. gr. 1035, no albumen. Ordered ten minims of tincture of digitalis, with half a drachm of compound spirit of ammonia three times a day; milk diet.

Oct. 16th.—Passed a restless night. Complains of abdominal distension and choking sensation in his throat. Pulse now uncountable; heart sounds cannot be differentiated.

20th.—Continues in the same condition, though his symptoms are exaggerated. Cyanosis more marked. Has developed a harsh ringing cough. Is in an extremely excitable state, throwing himself about in bed and imploring relief. Vomits everything taken; says milk chokes him. Medicine stopped; ice-bag to præcordial region; ice to suck, and teaspoonful doses of Brand's essence of beef to be taken every hour.

21st.—8 P.M.: Pulse still uncountable; vomiting less frequent; is very much excited. A quarter of a grain of morphia injected.

22nd.—10 A.M.: Expresses himself as feeling much relieved. Pulse 82, full, yet dicrotic and intermittent. Heart: no bruit to be detected, but the pulmonary second sound is markedly accentuated. Has passed 86 oz. of urine in the last twenty-four hours.

24th.—Continues better. Passed 177 oz. of pale limpid urine in the last twenty-four hours. Heart-sounds clear and well struck; cyanosis less marked.

30th.—The superficial cardiac dulness is now normal; apex-beat also in normal position, and not now diffused. All pulsation in epigastric and hepatic regions gone. On auscultation, the accentuation of the pulmonary second sound has disappeared. Pulse 60, still dicrotic (dicrotism well shown in sphygmogram). Continues to pass from between sixty and seventy ounces of urine in the twenty-four hours.

Nov. 16th.—Up daily for the last fortnight; helps to make the beds, and has no symptoms whatever. Has had no medicine since Oct. 22nd, save purgatives occasionally. To be an out-patient.

Remarks by Dr. MAJOR.—When first seen on admission the diagnosis of organic disease of the heart was made, but on surveying the case as a whole, the weight of evidence is in favour of functional disease of that organ. I will therefore give shortly the evidence on either side. (*a*) Points in favour of organic disease: (1) Occupation (a blacksmith); (2) history of anasarca during a previous attack; (3) the obviously dilated condition of the heart when admitted; (4) the marked cyanosis. (*b*) Points in favour of functional disease: (1) No history of acute rheumatism; (2) suspicion of venereal excess; (3) attack not brought on by exertion; (4) absence of orthopnœa; (5) sudden onset of attack whilst digestion was disturbed; (6) no bruit to be detected, either during the height of the attack or when the heart had slowed down; (7) no symptoms of mechanical derangement of the circulation, save the dilatation of the heart and the cyanosis, the probable explanation of this latter symptom being over-action of the heart, due to some functional derangement of the cardio-inhibitory centre in the medulla; the heart, as it were, having "got the bit between its teeth," was galloping away from its driver, the pneumogastric nerve.

DUNDEE ROYAL INFIRMARY.

HYPERPYREXIA OCCURRING TWICE IN THE COURSE OF ACUTE RHEUMATISM; TEMPERATURE OF 110·4°; COLD BATHS; REDUCTION OF HEAT AFTER EACH; DEATH; NECROPSY; REMARKS.

(Under the care of Dr. SINCLAIR.)

FOR the clinical record of the following case we are indebted to Mr. Malcolm A. Ker; and for the notes of the necropsy to Mr. A. M. Stalker.

John M——, aged fifty-five, shoemaker, was admitted into No. 12 ward of the Dundee Royal Infirmary on July 8th, 1885, suffering from an attack of acute rheumatism. For the last thirty years the patient has been very intemperate in his habits. Twenty years ago he was seized with an attack of acute rheumatism, ascribed by him to alternations of heat and cold which he was exposed to while at work. Since that time he has had numerous attacks, from which he always made good recoveries, being completely free from pain during the intervals. The present attack began about a week previous to admission, the joints of the upper extremities being affected first; later, the ankles, knees, and hips were involved.

State on admission.—The patient is a well-developed muscular man. Face flushed; skin hot and dry. Complains of pains in his ankles, knees, hip-joints, and right wrist, the knees being considerably swollen and imparting a feeling of fluctuation on palpation. Tongue thickly furred; appetite poor; bowels constipated. Pulse 112, of fair volume, but very compressible. Heart-sounds feeble, but pure. Physical signs of lungs normal. Temperature at 4 P.M., 102·8°. Ordered half a grain of extract of podophyllin and twenty grains of salicylate of soda every hour for three hours.

July 9th.—Temperature 100°. Urine acid in reaction; sp. gr. 1035; large deposit of urates; contains albumen. Salicylate of soda increased to twenty grains every hour for six hours. Evening temperature 100·2°. Pains much relieved to-night.

10th.—Temperature 99·6°. Swelling of knees gone. Still some pain in affected joints. Evening temperature 100°.

11th.—Temperature 101·4°. Patient states that he is quite free from pain. Salicylate of soda reduced to twenty grains every hour for four hours.—11.40 A.M.: Temperature 101·4°.—3 P.M.: Temperature 103·6°.; pulse 142, bounding; very compressible. Patient has a vacant, stupid look, and talks in a silly manner.—3.45 P.M.: Had twenty grains of antipyrin.—4.45 P.M.: Temperature 103·6°. Antipyrin repeated.—6.30 P.M.: Temperature 105°.—7.15 P.M.: Had twenty grains of sulphate of quinine.—9.20 P.M.: Temperature 104·2°. Patient is violently delirious. Put into strait jacket. Had one-third of a grain of hydrochlorate of morphia subcutaneously.—10.30 P.M.: Delirium has passed into a state of complete coma. Breathing stertorous.

12th.—12.15 A.M.: Temperature 107°. Pulse 150, full, compressible. Respiration 30 per minute.—1 A.M.: Temperature 108·2°.—1.30 A.M.: Temperature 108·8°. Radial pulse imperceptible. Heart-sounds almost inaudible. At this juncture patient was put into a bath at a temperature of 80° F., which was rapidly cooled down, by the addition of ice, to 50° F. The following tabular statement is an accurate record of the observations made at the time:—

Time.	Temp. of bath.	Temperature of patient per rectum.	Remarks.
A.M. 1.30	80°	108·8°	Patient placed in bath; radial pulse imperceptible; heart-sounds almost inaudible; complete coma.
1.35	80	110·4	Had enema of 2 oz. of brandy.
1.45	50	109·0	Enema repeated.
1.50	55	107·8	Pulse 140, perceptible at radial artery.
1.55	53	108·0	—
2.5	53	102·8	Pulse 120, gaining strength.
2.10	55	102·0	—
2.16	57	101·4	Pulse 124, taken out of bath.

2.16 A.M.: On being lifted out of the bath, the patient was rolled in a warm blanket, carried to bed, and rapidly dried. He was then transferred to another bed, surrounded by hot bottles, and covered by warm blankets. At 2.30 A.M., half an hour after removal from the bath, the temperature was normal; pulse 116, good; respiration 28 per minute; slight conjunctival reflex. During the next hour the temperature gradually sank to 95·2°, after which reaction set in and it began to rise. The following table shows the changes in the patient's state from the time of his removal from the first bath until he was immersed the second time:—

Time.	Temp.	Remarks.
A.M. 2.30	98·8°	Pulse 108, improving in strength; patient beginning to resist; slight rigor; had 1 oz. of hot coffee per rectum.
2.38	97·9	
3.0	96·0	Severe rigors; conjunctival reflex absent; pulse 100, very weak; enema of coffee repeated, but not retained; had hypodermic injection of 25 minims of ether.
3.30	95·2	
4.0	97·4	Pulse 112, improving; rigors gone.
4.30	98·2	Pulse 112.
5.0	99·8	Pulse 110.
5.30	100·6	Pulse 100.
6.0	101·6	Pulse 105.
6.30	101·8	Pulse 105.
7.0	103·0	Pulse 126, respiration 20; epiglottis falling back during inspiration; conjunctival reflex well marked; had hypodermic injection of 30 minims of ether.
7.30	103·2	Pulse 110; had enema of sulphate of quinine (30 grains); ice-bags to spine and head.
8.0	103·0	Pulse 110; respiration 30.
8.30	104·0	Pulse 120, very weak; had hypodermic injection of
9.0	104·6	30 minims of ether.
9.30	105·0	Pulse 116; patient has had an attack of severe bilious vomiting; over whole surface of chest numerous moist râles are heard; gurgling in trachea and large bronchi; frothy mucus flowing freely from nostrils and mouth; respiration 30, stertorous; cyanosis of face; patient was placed on his side, sinapism applied to front of chest, and turpentine stupes over the bases of the lungs.
10.0	106·0	Pulse 116; respiration 32, less laboured, gurgling less; had hypodermic injection of 30 minims of ether.
10.30	106·2	Pulse 109; after consultation it was agreed to repeat the former treatment, and the patient was accordingly transferred to a bath at a temperature of 90° F., which was rapidly cooled down to 56° F.

The following are the results of the treatment:—

Time.	Temp. of bath.	Temp. per rectum.	Pulse.	Remarks.
A.M. 11.0	90°	108·6°	108	Put into bath; complete coma; stertorous breathing.
11.5	66	108·0	108	—
11.10	60	107·5	112	Had hypodermic injection of thirty minims of ether.
11.15	57	106·3	108	Slight movement of hands.
11.20	56	105·2	104	—
11.25	58	103·9	108	Heart sounds very faint; had enema of 2 oz. of brandy.
11.30	59	—	96	Thermometer would not rise.
11.35	—	—	—	Taken out of bath.

At 11.35 A.M. the patient was removed from the bath, and underwent the same treatment as on the former occasion.

Five minutes later the temperature was 98·3°, pulse 84, and gaining strength.—11.40 A.M.: Had two ounces of brandy and one pint of beef-tea by the stomach-tube.—12 noon: Temperature 95°; pulse 100; respiration 100, laboured.—1 P.M.: Temperature 96°; pulse 105.—1.30 P.M.: Temperature 99°. Had hypodermic injection of thirty minims of ether.—2 P.M.: Temperature 101°; pulse 115.—2.30 P.M.: Temperature 101°; pulse 118. Ether repeated.—3 P.M.: Temperature 101·6°; pulse 120; respiration 30, more laboured.—3.10 P.M.: Numerous sibilant and moist râles heard over the whole chest; tracheal gurgling; no dulness over bases of lungs; frothy mucus flowing from the nose and mouth; great dyspnœa; cyanosis of the face remarked; pulse very weak.—3.20 P.M.: Had one-tenth of a grain of apomorphia subcutaneously; vomited immediately.—3.30 P.M.: Tracheal gurgling much less; dyspnœa diminished; pulse imperceptible.—3.50 P.M.: Died.

Necropsy, twenty hours after death.—On opening the thorax the lungs did not collapse. The pericardium did not contain any fluid. The substance of the heart presented a waxy appearance on section. The cavities were filled with decolourised blood-clot. All the valves were normal. Lungs: These were fairly crepitant throughout. On section a large quantity of serum could be expressed. The bronchi were injected. Abdomen: The liver, spleen, and kidneys were hyperæmic. Head: The brain was anæmic.

Remarks by Dr. SINCLAIR.—Hyperpyrexia is a complication of sufficient interest and rarity to justify the publication of every case. In the three years that have elapsed since the publication of my first case[1]—a successful one, occurring in the course of acute rheumatism—I have seen pronounced hyperpyrexia only three times: once it occurred in scarlet fever, once in puerperal pneumonia, and the third time in the case so well recorded above by Dr. Ker. The scarlet fever case occurred in the practice of Dr. Stewart, of Newport-on-Tay. The puerperal pneumonia case occurred in my own practice. In the latter I had the advantage of the advice and assistance of my neighbour, Dr. Macewen. Both, unfortunately, terminated fatally; but the power of the cold bath in reducing the temperature and improving the general condition was amply demonstrated in both cases. I was summoned to see the patient whose case is recorded above about 1 o'clock on the morning of July 12th last, and found that his temperature had been rising since 3 o'clock on the previous afternoon. When I arrived at the infirmary I was told that the patient had been going so steadily downhill since I was summoned half an hour previously that his case seemed hopeless; and indeed matters looked bad enough. The patient had a sunken aspect, was comatose, was breathing rapidly and stertorously, had no radial pulse, almost inaudible heart-sounds, and a temperature of 108·8°. But I had sufficient confidence in the value of the cold bath, derived from a perusal of the cases of Dr. Wilson Fox and others, and from my own personal experience, to think myself justified, even in such desperate circumstances, in giving the system a trial. Accordingly, everything necessary was instantly prepared, and the patient was a few minutes later, immersed in a bath at a temperature of 80°. An ample supply of ice was used, and the water was—with difficulty at first, I confess—cooled down to 50° F. Dr. Ker's admirable statements show most clearly the effect of the treatment in restoring the patient from a state of coma, an almost paralysed circulation, and a temperature of 110·4°, to a condition of restored circulation and a temperature of 101·4°. At a consultation in the forenoon it was decided, as the temperature had risen rapidly to 106·2°, to repeat the bath. Again in desperate circumstances the patient was immersed, and again the temperature was reduced. But, although the effects were very satisfactory for the first twenty-five minutes, in the next five minutes the body-heat fell from 103·9° to a subnormal point, and this in water which had actually gained three degrees in the preceding ten minutes. The patient was, of course, at once removed to bed, and again he rallied. But when I saw him again, about 3 o'clock in the afternoon, his respiration was so seriously embarrassed by the accumulation of bronchial exudation that I gave him one-tenth of a grain of apomorphia hypodermically. This certainly had the effect of emptying his stomach and the bronchial tubes, and consequently his dyspnœa was much relieved; but soon after his circulation failed and he died. Fatal though the result unfortunately was in this case, I think there can be no doubt of the soundness of the treatment. Before the immersion of the patient on both occasions he was evidently dying, and dying rapidly, from excessive heat. On both occasions the bath rescued him from imminent peril against which no other known therapeutic agent is of the slightest use. Had his tissues suffered less, or had he had more resisting power, the result might have been very different. But the lesson of the case is clear and certain: that in the external application of cold we have a remedy on which we can rely for the reduction of excessive temperature in the human body. I cannot conclude this note without expressing the gratitude which I feel for the invaluable aid I received during a very anxious time from my medical friends, and especially from Drs. Stalker, Mackie Whyte, and Ker. The nurses of the ward joined with these gentlemen in performing their trying duties with an energy and a loyalty which are beyond all praise.

[1] Edin. Med. Journal, August, 1882.

Medical Societies.

PATHOLOGICAL SOCIETY OF LONDON.

Colloid Degeneration of Breast and Omentum.—Spontaneous Fracture of Urinary Calculi.—Diffuse Sclerosis of Brain in an Infant.—Large Aneurysms.—Post-nasal Fibroma in a Child.—Syphilitic Necrosis of Vomer.—Stricture of Rectum.

AN ordinary meeting of this Society was held on Tuesday last, Dr. J. S. Bristowe, F.R.S., President, in the chair.

Mr. EVE showed several Tumours with Colloid Degeneration. The first specimen was a tumour of the omentum removed from a man aged twenty-seven, whose illness lasted six months; there was some ascites. An operation for the removal of the tumour was performed by Mr. Lawson Tait. The tumour had a very flocculent appearance, and many sago-grain-like bodies were found therein. An alveolar structure, of which the spaces were filled with colloid material, was to be seen in sections; the glue-like material resulted from mucoid degeneration of the sarcomatous tissues, for spindle-shaped and other cells could be detected. The tumour was a myxosarcoma, and not colloid carcinoma. He also showed another myxosarcoma of the omentum, as well as a true colloid cancer of the omentum, secondary to cancer of the ovary. Another was a specimen of considerable enlargement of the omentum from tubercular disease, removed from a woman who was operated on for acute peritonitis. Three months later the patient died from tubercular peritonitis. Specimens of colloid cancer of the breast had been presented to the Royal College of Surgeons by Messrs. Hulke and Savory. The disease in one case had lasted three years; the patient was a female aged eighty. Operation had been completely successful. Under the microscope an anastomosis of columns of epithelial cells was seen, together with mucoid degeneration of the stroma, not of the cells. Some spheroidal bodies with concentric lamination were always found in the stroma; these were due to change in the connective tissue cells of the stroma, and were very abundant. They had been described as "colloid" bodies; reagents had no effect on them. They were examples of concentric lamination, occurring without the presence of inorganic or crystallisable salts. Carcinoma myxomatodes had been described by German authors, and Billroth had recorded a case of cholesteatoma of the breast, that Mr. Eve thought was of the same nature. In reply to Dr. Bristowe, he said that the first case of omental disease succumbed about the time of operation.

Mr. S. JONES showed many Urinary Calculi illustrating Spontaneous Fracture. The calculi were taken from the bladder of a gentleman, aged eighty-one, whose gall-bladder was also full of calculi. He had suffered for twenty years from rheumatic gout, and for the last seven years from passage of calculi per urethram. Extravasation of urine necessitated perineal section, and through the incision in the membraneous portion of the urethra a number of pieces of calculi were extracted. Ten days later the patient died, and in the bladder seven more or less complete calculi and eleven detached pieces were discovered. Mr. Jones considered that these calculi contained in their interior soft deposits of mucus, urate of ammonia, and phosphates, which by decomposition and development of gas led to fracture.

Dr. Bernays had found urate of ammonia and carbonate and phosphate of lime in some brownish material which occupied the radiate fissures in the stones.—Mr. H. H. CLUTTON said that his specimen differed in that the calculus broke up from causes acting on the outside.—Dr. W. M. ORD said the specimens shown illustrated two methods that appeared to him to be operative in the spontaneous disruption of calculi. In some cases no doubt Mr. Jones's suggestion held good. The influence of colloids on calculi was a very interesting subject, and Rainey had shown that spheres of carbonate and phosphate of lime deposited in a colloid when removed to a second colloid fluid became eroded by a sort of molecular disintegration, and this happened though the two colloids differed but slightly in nature. This kind of process probably explained the disintegration in Mr. Clutton's specimen. Dr. Ord had shown seven specimens illustrating erosions of calculi due to alterations in the media in which the calculi existed; it was necessary to suppose that the fluid in the bladder underwent some kind of change equivalent to the above-mentioned experimental alterations of Rainey.

Dr. HENRY ASHBY showed a Brain affected with Diffuse Sclerosis taken from a male infant aged twenty-two months. The chief phenomena observed were convulsions, want of power of hearing or vision, nystagmus, retraction of the head, rigidity of the right arm and less of the left, occasional stiffness of the legs, mouth always open, noisy respiration as from paresis of soft palate, constant groaning, "smacking" of lips, and difficult deglutition. He was watched from eight months of age till death. At the necropsy there was some external hydrocephalus; the arachnoid was thickened; the pia mater consisted of many enlarged and tortuous capillary arteries, and could be stripped off without lacerating the brain substance; the cerebrum was everywhere very firm and tough; the cerebellum was apparently normal. The want of development of convolutions and sulci was a marked feature. The Sylvian fissure was deeply cut, but there was no trace of the fissure of Rolando; the grooves branching from the Sylvian fissure were occupied by branches of the middle cerebral artery; the frontal lobes had a somewhat granular aspect; there was but little differentiation of grey from white matter as seen on section; the lateral ventricles were much dilated, as well as the descending cornua. The microscope showed that there were very few caudate cells left in the grey matter; and the latter had undergone an indurating process, though no actual fibrous tissue could be detected. The perivascular spaces were enlarged, and the vessels that enter the cerebral cortex were distended with blood. The pyramidal tracts were markedly atrophied, especially the left tract, above the medulla. There were also descending degenerations in the spinal cord. On section the internal capsule was seen to be of the usual white colour; the white substance occupied less space than usual, was indurated, and of a grey colour like the cortex.—Dr. THOMAS BARLOW said that the specimen would serve to elucidate some obscure points in the pathology of brain disease in children. He had investigated one very nearly like Dr. Ashby's specimen. It was the brain of a microcephalic child, in which the disease was of intra-uterine origin. The brain was very small, and differed in this from the specimen shown. The distribution of the meningitis was much the same as in Dr. Ashby's case. There were indications in places of convolutions having been partly formed. Calcareous particles were also detected scattered over the meninges. He regarded meningitis as one of the causes of sclerosis of the brain.—Dr. HALE WHITE asked what the condition of the pupils was, for the anatomical characters were much like those of general paralysis of the insane.—Dr. ASHBY replied that the pupils were unequal; the brain gave no marked signs of remains of a meningitis, and he was not certain of the mode of origin of the disease, though it might be syphilitic.

Mr. BARWELL exhibited specimens of a large Abdominal and Popliteal Aneurysm taken from a man. There were enlarged liver and granular kidneys. Treatment by compression was adopted for a time for the popliteal aneurysm. Later on, Mr. Barwell ligatured the femoral artery with an ox-aorta ligature. The abdominal aneurysm weighed seven pounds; it had eroded the vertebræ from the eleventh dorsal to the second lumbar; the aneurysm also pressed upon the left lung and pleura. It was filled with laminated clot, but was still traversed by a channel through which the blood flowed.

Mr. CHURCHILL showed a specimen of Post-nasal Fibroma removed from a boy aged eight years and a half. It was attached by a pedicle apparently to the upper surface of the velum palati, and had two digital processes, one of which was prolonged into each nostril. It hung in a pendulous manner over the upper opening of the larynx, and apparently had prevented the full development of the child. A fine reticulum of delicate fibrous bands, with some mucous tissue, was seen in sections; the myxomatous character was most marked in the processes above mentioned. He also showed specimens of (congenital) Syphilitic Necrosis of the Vomer, taken from a boy aged ten years; the fragments of bone were passed at intervals of some months. The syphilitic evidence was undeniable. Interstitial keratitis, fissures at the angles of the mouth, and pegged teeth could be seen now in the boy, who was also shown.—Mr. H. T. BUTLIN said the first specimen appeared to him to be undoubtedly myxomatous; it probably had grown from one of the turbinate bones; it was a very large mucous polyp, containing a mixture of mucous and fibrous tissues.

Mr. HARRISON CRIPPS exhibited a specimen of Tubular Stricture of the Rectum. The patient was a female, aged thirty-two, who suffered after parturition from pelvic cellulitis, and some pus had been passed from the bowel. After getting about, some difficulty in passing motions came on. On admission to the hospital emaciation and albuminuria were noted, and the patient was extremely ill. The operation of colotomy was followed in a week by death. There was a tubular stricture about five inches in length, commencing three inches from the anus. He observed great hypertrophy of the circular muscular coat, which was due to dense fibrous tissue. The origin of the disease was evidenced by the presence in the bottom of Douglas's pouch of a cicatrix, which had caused a bend in the rectum, and was the starting-point of the stricture. He did not think that a majority of these cases of rectal stricture in women were due to syphilis; but many of them owned a cellulitic origin. It was extremely rare in men, being ten times more frequent in women; whereas syphilis was far more common in men. He considered that this fact militated against the view that such cases were of syphilitic origin. They began as annular strictures; the consequent ulceration led to infiltration of the muscular coat, and so to a tubular constriction.

Mr. BRUCE CLARKE brought forward a specimen of Rectal Stricture of undoubted syphilitic origin. The patient had suffered from stricture for four years. Colotomy was performed, and four days later death ensued. Emaciation and albuminuria were marked symptoms. Palpation of the rectum showed the disease to be of cartilaginous consistence. There was hardening of both longitudinal and circular muscular coats, and this was especially marked four inches from the anus, where the stricture commenced. There was a total absence of epithelium, but in the submucous and muscular coats enormous numbers of small round cells had replaced largely the normal tissue. Some small round cells were also seen in the internal coat of the artery.—Mr. EVE said there was in the museum of the Royal College of Surgeons a Hunterian specimen of stricture of the rectum composed almost exclusively of hypertrophy of the muscular coats, and believed to be due to spasm.

The following card specimens were shown:—Mr. Eve: (1) Dislocation of Hip of Cow; (2) for Mr. A. Lingard, Specimens of Actinomycosis in Ox-n. Mr. Clutton: Spontaneous Fracture of Urinary Calculi. Mr. Churchill: Syphilitic Necrosis of Vomer (living specimen). Dr. Goodhart, for Dr. Marshall: Calculus in Bladder of Female Child aged two years. Mr. J. B. Sutton: Congenital Inguinal Hernia in a Monkey. Mr. H. Fenwick: Fibromyxosarcoma of Bladder. Dr. Hadden: (1) Lipæmic Blood in Diabetes; (2) Mucous Cyst of Tongue; (3) Gumma pressing on Ureter. Mr. J. H. Morgan: Double Dislocation (? Congenital) of Hip-joints.

MEDICAL SOCIETY OF LONDON.

Moot Points in Syphilis.

AT the meeting of this Society held on Monday last, Dr. W. M. Ord, President, in the chair, Mr. JONATHAN HUTCHINSON, F.R.S., read his second Lettsomian Lecture on some Moot Points in Syphilis.

The lecturer first considered the relationship between secondary and tertiary phenomena. It has been supposed that the viscera and nervous system suffer only in the

tertiary period, and that in the latter stage there is a general tendency to ulceration and to deep extension, which is not observed in the secondary one. "Gumma" has been supposed to be characteristic of the tertiary stage. But opinions on these matters have changed. It has been argued that syphilis may be very severe and run through some of its late stages before it has finished its first. By degrees, however, we are arriving at another interpretation of these facts, and are beginning to perceive that the old classifications of the phenomena cannot hold their ground, and that we must seek for other characters by which to distinguish the secondary and tertiary stages—not, indeed, that the old observations were wholly wrong.

Cases were given in illustration of the circumstance that gummata may occur in the internal viscera, certainly within the "secondary" stage of the disease. In the adult it is an every-day occurrence to observe symptoms implying periostitis, transitory disease of the nervous system, or even visceral affections during the secondary period. It is not so much in the special location, or even the character of the morbid changes, as in their boundaries, that we observe a difference between them and the lesions of the tertiary stage. The gummata of the early period are small and numerous; those of the later one are large, and often few in number, or even single. Those of the early period easily disappear either spontaneously or under mild specific treatment, whilst those of the tertiary stage persist and grow indefinitely unless adequately met. Hence it may easily happen that the indications of internal disease in the secondary stage may often pass unnoticed, whilst those of the later one rarely escape discovery. This point was argued more in detail in reference to two special lesions which, as they occur in parts open to inspection, are not liable to the fallacies that attach to speculations on lesions of the internal viscera—rupia and periostitis. Rupia is claimed as a definite tertiary symptom, but Mr. Hutchinson contended that this was a mistake. It almost invariably begins within a year of the chancre, and often much earlier. Everything that ulcerates is not necessarily tertiary. Rupia was defined as of bullous origin and tending to the production of conical crusts. It is never one of the earliest lesions, but occurs after erythematous and papular eruptions have disappeared. Often there has been an interval of good health, and all treatment has been laid aside. Sometimes the rupia happens apparently as a consequence of neglect of treatment. Very often a peculiarity in the diathesis of the patient has been implied by the fact that his chancre inflamed and ulcerated. Sometimes a papular eruption is converted into an ulcerating or rupial one by too vigorous treatment. A "scar-leaving" eruption often follows a "scar-leaving" chancre. The belief that the occurrence of rupia or other ulcerating eruption makes it desirable to avoid mercury and use only iodide of potassium is, Mr. Hutchinson thought, fast losing its hold. But it is really a question of *dose*. A condition allied to rupia, which is also something like lupus, is likewise met with; the round form of the sore is lost, for the inflammation spreads at its edges by local infection and allows of healing in the centre; thus a horseshoe form is assumed. This lesion may last indefinitely, unless carefully treated. It seldom originates *de novo* as a genuine tertiary; but it is more commonly a sort of continuation of an imperfectly treated eruption of early date. It ceases to be a generalised eruption, is no longer arranged with any tendency to symmetry, and is often more amenable to local than internal treatment. Mr. Hutchinson thought we might with justice speak of syphilitic lupus just as we had syphilitic psoriasis and syphilitic lichen. They are the syphilitic imitations of the type-malady. The most acute and rapidly destructive of syphilitic lupus is what has been termed erosive lupus, an almost phagedænic affection, which usually attacks the nose, and which is more frequently seen in inherited than in acquired syphilis. As a rule all lupoid affections rank as tertiary, and it would scarcely be too bold a generalisation to say that all the tertiary affections of the skin are of a lupoid character; by which is meant that they are all serpiginous, asymmetrically arranged, and all leave scars. The time for roseola, psorasis lichen, and even rupia, is past; and if the skin at this stage suffers at all, it will form a tubercular affection, which creeps at its edges, persists indefinitely unless cured by treatment, and leaves scars. It is, in fact, a serpiginous gumma of the skin. This generalisation is a most important one, as giving a clue to the character of the hidden affections of the deeper parts which occur in this stage. They, like lupus, may be serpiginous, the cell growth tending to infect the edge of the patch and thus cause persistent spreading. Such a pathological hypothesis would explain the phenomena of ophthalmoplegia externa, in which there are indications of slowly spreading central disorganisation. Locomotor ataxy may be regarded in the same light.

Periostitis may be secondary as well as tertiary. The nervous system may be attacked within the first year—e.g., neuro-retinitis, sensory disturbances, paraplegia, cerebral paralysis, also inflammation of the internal ear. The first attack of choroiditis disseminata often occurs within the first eighteen months; the pia mater might be inferred to be affected with similar changes. Mercury, if it does not cure, usually delays and retards symptoms, and so what would be secondary becomes tertiary in time owing to treatment. Mr. Hutchinson thought that it was quite impossible to classify secondary and tertiary symptoms into two groups with reference to the tissues that are attacked. We must thoroughly understand that there is no lesion which may not happen and no tissue which may not be attacked during the secondary stage. Everything that is tertiary is local in a sense which is not true of any of the secondary phenomena. The difference between secondary and tertiary eruptions of the same tissues was illustrated by what happens in the case of the palm of the hand and of the tongue. The relation of syphilis to locomotor ataxy was discussed, and Mr. Hutchinson was of opinion that syphilis predisposed to the nervous disease. Another moot point is the relation of syphilis to the specifics used in its treatment. The claim of mercury to rank as an antidote is strengthened by the recent experience of the antiseptic power of weak solutions of corrosive sublimate as well as by other considerations.

Mr. Hutchinson stated his own rules of practice. He employs grey powder in one-grain doses three to six times a day, prolonged over a period of six months. Respecting the results of treatment in general, he asserted that he had never in any single case of late years seen a severe eruption on the skin develop itself after a mercurial course of the kind indicated. It is a fact that mercury manifests antidotal power in that it can not only remove but anticipate and prevent by far the most conspicuous manifestations of the disease. He could not make so strong an assertion respecting some other of the symptoms of the later part of the secondary stage. It is a question of some interest whether syphilis has any tendency to develop itself by, so to speak, a series of successive waves. The observed phenomena may, however, be connected with the intermittent employment of antidotal treatment. Some cases of rupia, the worst that could be seen, were met with under such conditions; the patient having been cured of a first and much milder outbreak of eruption, and then after an interval of some months becoming the subject of a more severe one.

In conclusion, Mr. Hutchinson said that if his argument held good, we must regard the terms secondary and tertiary as applicable to different periods of time, and not to different phenomena. At the same time, it had been fully admitted that syphilitic processes do display different tendencies in relation with the stage in which they occur. The position assigned to tertiary symptoms has been that of late relapses of morbid processes in tissues previously damaged. In this way it has been suggested that syphilis may occupy an important part in predisposing to such maladies as locomotor ataxy, without actually causing them.

ACADEMY OF MEDICINE IN IRELAND.

The Surgery of the Soukim Expedition.—Organisation of the Medical Department of an Army Corps.

AT a meeting of the Surgical section on Dec. 11th, 1885, Mr. TOBIN, late of the Army Medical Department, read a paper on the Surgery of the Suakim Expedition. He explained the nature of the appointment styled "field surgeon" (which was that held at Suakim by himself), and pointed out the necessity for its being made a recognised appointment and its duties defined by the regulations. The statistics of the expedition were given, from which it appeared that of 129 wounded 124 recovered, or 97 per cent. Having exhibited a femur fractured by a rifle bullet at a point remote from that struck, the author pointed out the great difference noticed during the campaign between

wounds from the Martini-Henry and Remington rifles, and cited cases in point. By referring to the experiments of Professor Longmore, he showed that those on the dead body afford a reliable means of ascertaining the effects of gunshot wounds on living tissues, and that therefore the extension of such experiments was a desideratum.—Mr. WHEELER said there was a great advantage in having a surgeon who is in the habit of operating accredited to the army on active service. Billroth was attached to the German army during the Franco-Prussian war. He had the local rank of Surgeon-General, and was probably as well paid as most Germans. But if the British taxpayer desired the advantage of such aid for the British army in the field, he would not only have to pay largely the civil surgeon attached to the army, but make provision for his family should anything untoward happen to him. The statistics of the mortality of the wounded were most creditable, of 129 wounded only five deaths being recorded; and from the nature of the wounds of the five fatal cases it would have been almost impossible to save life. This very small mortality was due partly to the excellent care which was always afforded to the British soldier by the Army Medical Department, and partly to the very easy transport, the hospital where the operations took place being only about three miles from the seat of action, where the wounded were conveyed by dhoolies. The climatic influences, of which he had personal knowledge (having served some years ago in the country), were combated by shipping the patients as fast as possible and getting them away to sea. There was also drainage well established in every case, the necessity for which in wounds and after operations had been first definitely laid down by the late Mr. Callender. Moreover, there was easy transport in the Egyptian campaign, the wounded having been conveyed by water from Kassassin. The specimen of the femur exhibited by Surgeon-Major Tobin was unique. He was not aware of any recorded case of a fracture several inches away from where the ball struck. It was evident the ball had grooved the bone between the trochanters, causing splintering, but a fracture of the bone had taken place several inches below the neck of the bone. Dupuytren had written on the splintering of bone, classifying the splinters, and emphasising the impropriety of removing splinters indiscriminately. Professor Longmore's experiments, which Mr. Tobin had alluded to, were exceedingly valuable. The differences in the wounds produced by the bullets from the Martini-Henry and the Remington rifles would be accounted for by the great difference in the charge of powder.—Dr. BENNETT valued the communication as showing that much more conservative surgery might be adopted in the treatment of gunshot wounds than had been hitherto the rule. So, where a rifle bullet passed through the shaft of a bone tolerably near a joint, or even remote from it, they were not to conclude that there would be longitudinal splintering into the joint necessitating the amputation of the limb. The immunity which had been pointed out followed from the success of the antiseptic treatment.—Dr. BAXTER mentioned that in his experience of the Franco-Prussian war the percentage of recoveries was very good, though not so large as Mr. Tobin had recorded. Antiseptic dressings were never used. Ether was the anæsthetic.—Mr. TOBIN replied. In reference to Dr. Bennett's remark on the fissuring of the bones, the experiments of Professor Longmore showed that when bullets were fired into long bones the fissuring was often carried down to the capsule of the joint, the synovial cavity being opened into. By rough handling the fissuring would extend into it, but with care the wound was rendered non-penetrating. He thought that cleanliness could not be better arrived at than by carrying out the idea which had got the name of "Listerism." In his operations, a long anterior flap, if easily cut, was the one he found most suitable, as falling over the wound like the cover of a box, letting it go on healing, whether dressed or not, and therefore obviating the necessity of frequent dressings.

Surgeon-Major EVATT delivered an address on the Organisation of the Medical Department in an English Army Corps, with suggestions as to Volunteer aid. He said that civil doctors generally knew nothing of our army system of work, and both sections of the profession suffered in consequence. The army surgeon had developed ambulance aid to a point far beyond average civil arrangements, and the systematic training of the students in this work would be useful to all civil doctors. The medical service of the army had worked out a very logical system of hospital administration, based on the principle that the trained medical officer was the best fitted individual to be governor and director, as well as scientific head. Civil doctors, as a rule, had little power in their hospitals, and the students received no training in administration; yet it was a highly important matter, as hospitals went to grief constantly, not from defective science in surgery, but from bad nursing, bad construction, bad drainage, want of discipline and supervision—yet in none of these heads were the students trained. He then explained the war system of the army corps, showing on a diagram the battalion aid, the bearer companies, the field hospitals, the hospitals on the communications, the base hospitals, and the hospital ships, and traced the course of the wounded soldier from the battle-field back again to Dublin. He then said that, with the new duties undertaken by the medical service of the army, no change had been made in the student's training. No training for enforcing discipline had been given to the student, and no teaching in ambulance aid or in hospital administration had as yet been made part of the student's course. He suggested that the students should, as a matter of routine, be exercised in ambulance drill; secondly, that definite teaching in hospital administration should be given them—viz., in cooking, nursing, *personnel*, construction, ventilation, and drainage; and, thirdly, that residences for students were highly desirable in connexion with the medical schools, to improve the discipline of the student and his social comfort.—Mr. CANTLIE, of Charing-cross Hospital, London, advocated the importance of bringing civil surgeons into "touch" with the Army Medical Department by the means which Surgeon-Surgeon Evatt had suggested, and stated that he had himself organised a volunteer corps of medical students.—Dr. BARTON considered the advantage of the training to medical students would be very great, but, while willing to join in the project, felt unable to decide at once as to its practicability.

SHEFFIELD MEDICO-CHIRURGICAL SOCIETY.

Extra-uterine Fœtation.—Pseudo-hypertrophic Paralysis.—Progressive Muscular Atrophy.—Inflammation of Tibia.

AT the meeting on Dec. 3rd, 1885,

Mr. C. ATKIN showed a specimen of Extra-uterine Fœtation, the rupture of which had caused death in sixteen hours. The woman was thirty-two years of age, and it was her fifth pregnancy. The menstrual flow was noticed a week before and on the morning of her death. Her symptoms led the druggist who was called in to treat her for poisoning. Mr. Atkin laid stress on the importance of diagnosing internal hæmorrhage, and the urgent necessity of operative interference in such cases, cold and hæmostatics being perfectly useless.

Mr. D. DYSON related two cases of Pseudo-hypertrophic Paralysis. The first patient exhibited was a boy aged eleven, who had had symptoms since the age of five. Measles and scarlet fever were the supposed causes. The gait, attitude, mode of getting up from the floor, and enlargement of calves and buttocks were characteristic. The progress of the case had been slowly downwards, notwithstanding the treatment consisted of electricity, nerve tonics, and exercise. The other case, a boy aged twelve, was a more advanced one. Heredity was a factor in the causation. He was now unable to stand, and there was much atrophy about the upper extremities. The same treatment as in the first case was of no avail. In both instances the mental condition was very good.

Dr. PORTER exhibited a case of Progressive Muscular Atrophy, of which the chief features were atrophy beginning in the muscles of both shoulders and both scapulæ, wing-like projection of the scapulæ, lordosis, coldness, and blueness of the hands, the temperature of the surface over the affected deltoids being 4° F. lower than that of the axilla or mouth. Latterly the hands had begun to assume the "main en griffe" form. Speaking of the lordosis, Dr. Porter said that Duchenne had described two varieties of curve in the spine, differing according as to whether the extensors or flexors of the trunk were principally involved. The case before the Society seemed to bear out this view as to the causation of the lordosis. The curve resembled the variety attributed by Duchenne to atrophy of the flexor muscles, and, whereas the patient could recover the erect posture after stooping, he was unable to rise from a recumbent to a sitting posture,

owing to failure in the flexor muscles. Dr. Porter alluded to the absence of the characteristic fibrillary contractions in his case, and stated that such was the case in at least one-fifth of those suffering from the disease.

Dr. GWYNNE showed a Tibia which had become the subject of osteitis some twenty years ago, and from which a sequestrum of bone six inches long had been removed. Two other pieces of dead bone, about three inches long, had been subsequently removed. The sinuses, after discharging more or less for five years, gradually closed up, leaving a fairly useful limb for about fifteen years. The patient (a woman), afterwards getting into low health through nursing weakly children, became subject to severe attacks of periostitis, with intense pain, which necessitated amputation, which was performed through the condyles of the femur. The specimen showed most of the shaft to be formed of dense callus, with obliteration of the central canal. The bone was abnormally thick, and there was a small sequestrum of dead bone, about two-thirds of an inch long, occupying its centre.

Mr. SNELL introduced a patient with double third nerve palsy, associated with contracted pupils.

Reviews and Notices of Books.

The Cyclopædia of India and of Eastern and Southern Asia, Commercial, Industrial, and Scientific. Third Edition. By Surgeon-General EDWARD BALFOUR. Three Volumes. London: Bernard Quaritch. 1885.

AT a time like the present, when the air is full of the signs of changes consequent upon a widening of the representative basis of our Government, and when that Government will be urged by forces resulting from the opinions and the energies of masses of people, it is of the greatest national consequence that a competent knowledge of our magnificent Eastern Empire should be spread amongst the population of this country. For if anything can steady the forces which govern, and prudently influence them too, a contemplation of the magnitude of the responsibilities which the Crown and the people of this kingdom have resting upon them with respect to India is that very thing. A fairly comprehensive knowledge of that great country, with its more than 200 millions of people, is now probably possessed only by a comparatively few cultivated men—men who have gained it by long residence in the East, or who have enjoyed much leisure, and have had at the same time access to the works of a variety of well-selected authors, which they have diligently studied. But this is now altered; for these three clearly printed volumes, which open so neatly, and which are so handy in size, contain more than all that is necessary for a clear and comprehensive knowledge of India and of Indian affairs.

In any cyclopædia, the articles of most interest will vary much with the occupation of its readers; and in this Cyclopædia of the East, the consulter of its pages, whether he be statesman, *savant*, civilian, soldier, or merchant, will find a succinct and wonderful store of information to answer his purpose and to fit him to draw well-based conclusions.

The book contains a good general index; but, besides this, there are three articles in the work each provided with an index of its own. These articles are: "Insects," "Mammalia," and the one with which we commence our short criticisms—viz., "India." The article "India" is properly the fullest in the work, and occupies nearly 200 pages. Here the author, after tracing the ancient history of the country, goes into its relations with her neighbours. Then he takes its provinces and deals successively with them, giving in well-arranged order, as he passes on, such general and particular information about its population and its resources as will satisfy the expectations of those who know the office of a book of reference like this. The article upon "British India" conveys a vast amount of information. The leading features of its history and progress are well brought out. With reference to these two articles, it appears to us that if printed and published apart from the rest of the work, with any additions or alterations which may commend themselves to the author, there are many of the more thoughtful of the reading public who, unable to purchase the entire work, will be glad to possess themselves of this *brochure*. But, if our suggestion be taken, we should like to see the book contain a map, if only in broad outline, to facilitate the study of the reader.

A comprehensive account of the mode of life of the Chinese people, of their government, of important things relating to trade, religion, &c., is given under "China." A person wholly ignorant of the country would get a very full general acquaintance with that little-understood empire from a perusal of this article. We note, however, that when referring to the comparative value of money, no account is taken of the fall in the price of silver. And we also note that in giving the derivation of the word "tea," it is stated to come from "te"; but we would suggest whether it does not rather come from the Chinese word "chaa," or "tsaa." But the article as a whole is a remarkably good one. There is a good article, too, upon "Salt," a commodity of the first importance to the people of India, and to the Government also, for it produces a revenue of no less than 7,000,000 sterling. It strikes us, also, that what is said under "Forests" is not only interesting, but that it has a value which will be better appreciated the more it is considered. For men have had too long a destructive bias towards the finest specimens of the vegetable world. In our own country, the general mischief as well as the pecuniary loss occasioned upon large estates (and upon many smaller ones too) by a want of attention to the science of forestry is patent to all who understand this important subject. In America, the quick accumulation of money has already been the cause of depriving enormous tracts of the northern continent of its most valuable timber; and the ill consequences of this pitiless destruction are beginning to be keenly felt. The art of forestry is akin with the daily duties of the medical man; for how much poor growth in both the animal and the vegetable world is due to unsuitable soil and surroundings! Much timber is stunted through overcrowding, with its attendant deficiencies of light and air, and by insufficient or unsuitable nourishment. The account given by Surgeon-General Balfour of the area of the forests and the character of the timber in the different parts of India is full of interesting facts. The subject of opium is well dealt with; its mode of preparation in different parts of the East is gone into, and the practice of opium-smoking is philosophically considered upon facts ascertained with painstaking care. The article as a whole is very interesting, and it deserves and will repay a careful and deliberate consideration. In fact, whether the author is dealing with general statistics and details of history and geography, or with philosophy, religion, science, or the industrial arts, the information is good; and care has been taken to keep pace with the latest authorities. The articles "Architecture," "Temples," "Cave Temples," "Hindú Sacrifice," "Stone Worship" and "Serpent Worship," "Education," "Rajputs," "Caste," and "Famines" are all excellent, and will well repay careful perusal. We think the biographical notices very good also, but in some important instances they are too contracted. Notices of such men as the two Lawrences should, we think, have been longer; so also should that of Outram, the two Muirs, Bentinck, Strachey, and the two Elphinstones. There are some, on the other hand, which are far too long in comparison. The revenue system of India scarcely receives adequate notice. We observe also that there are some short articles of great value subsidiary to others of a more general character, and yet no reference to them

is made. Had this been done, the student would more certainly secure to himself the information which the book contains upon a given subject. Take "Architecture" for example. A reference at the end of the article to Fatehpur Sikri, Agra, Delhi, Sarnath, and many others, would lead the reader to points of interest which might be missed from ignorance of particular localities, and the author would have been more just to himself, for his book is fuller of excellent matter than would readily appear.

We observe repetition also here and there. For example, under "Buddhist Architectural Remains," a description at some length is given of several caves—which, by the bye, are avowedly not Buddhist remains at all,—while the same information appears again a little further on under "Cave Temples," its legitimate place. Then in the science of botany, under the common name "Banyan Tree," particulars are given which appear again under "Ficus Indica." And what appears under the common name "Deodar," might have been given, with the particulars under "Cedrus Deodara," with a reference from one to the other. The same remark applies to "Flax" and "Linum Usitatissimum," and to other cases which might be mentioned. We notice, too, an account of the Siwalik Hills in three places—under (1) "Mountains," (2) "Himalayas," and (3) "Siwalik Hills." And we do not see that the articles entitled "Violin," "Socrates," "Cairo," "Kamtschatka," "Cachalot," "Luxor," and some others, have any claim to appear in this work. But, after all, what are these things when set against the real merits of this welcome and admirable addition to British reference literature?

We have not space to write as fully as we should like about these three volumes; but they make an addition to our standard works which can hardly be too highly valued, both because of their intrinsic merit and because they stand alone, so far as we are aware, making a storehouse full of important information possessed by but few people. The purpose of the work, and its character, alike indicate its place to be on the shelves of every public collection of books. So also should it be in the library, whether large or small, of everyone who wishes to possess a sound general and particular account of India and the East. The investment is indubitably a good one, for a share in the rich fruits of the author's indefatigable labours is more than a return for the expenditure required. And we heartily commend the volumes as an addition to the library of every medical man.

OUR LIBRARY TABLE.

American Gynæcological Transactions. 1884. New York: Appleton and Co.—This volume contains thirteen papers, the great majority of which are of considerable interest and value. With the exception of four, all of them discuss questions of treatment, seven dealing with abdominal section, directly or indirectly. It is a curious and not a very promising fact that so much attention should be paid to the end to be attained in medical science, while so little is done towards attaining that end by studying the processes of disease. There are some papers which deserve special mention, as Reeve on some Moot Points in regard to Inversion of the Uterus. The author ingeniously argues that inversion may begin at the cervix and extend gradually to the fundus, and brings some, but not conclusive, evidence in support of his view. Dr. Wilson, in a paper on Foreign Bodies left in the Abdomen after Laparotomy, gives an account of some cases in which portions of sponge have been left in the peritoneal cavity, and of the methods employed by different operators with a view to avoid this accident. Lusk contributes a valuable note on the Ring of Bandl; and Thomas a further report on Extra-uterine Pregnancy. The President, in his address, discusses the present aspect of Puerperal Diseases. In it he has referred to American gynæcological literature in a way which will command the approbation of every right-thinking man. The distinct and emphatic condemnation of the mode in which certain subjects have been treated, pronounced by such an authority from the chair of the Gynæcological Association, cannot fail to have a beneficial effect, and will tend to raise the standard of both literature and practice.

Ringworm: its Diagnosis and Treatment. By ALDER SMITH, M.B. Lond., F.R.C.S., Resident Medical Officer, Christ's Hospital, London. Third Edition, Revised and in part re-written, with illustrations. London: Lewis. 1885.—This book, originating in our own columns, is too well established in the favour of the profession for us to do more than express our satisfaction at the appearance of a third edition, with important additions on the history of the disease and of the fungus which underlies it. It is admirably practical in its character, both as regards questions of diagnosis and treatment, and every medical man should have it in his library. We have only one critical remark to make, and that is on the portentous growth of parasiticides. They seem to multiply faster than parasites, and yet Dr. Smith's book is a proof of the superiority of these little troublesome organisms to nearly all the poisons that can be heaped on them, so that in even skilled hands it still takes months or even years to effect a cure. We must hope for a speedy announcement of the great simplification of this class of remedies, which at present are decidedly more numerous than effective.

Report of a Committee of the Clinical Society of London, nominated Nov. 10th, 1882, to investigate Spina Bifida and its Treatment by the Injection of Dr. Morton's Iodo-glycerine Solution. Reprinted from Vol. 18 of the Clinical Society's Transactions.—We have received from the Council of the Clinical Society a reprint of the Report of the "Spina Bifida" Committee. We understand that the special reason why this Report has been issued in a separate form is that the Council of the Society may present a copy to each of the gentlemen who contributed to it by sending details of cases or specimens of spina bifida. In this the Council has made an excellent precedent, and it would no doubt encourage others to aid in joint-works of this kind if it were the custom to present each contributor with a copy of the report when issued. Of the merits of this particular Report we have already spoken. We regard it as the most valuable yet issued by the Clinical Society. The pathological section has been very carefully done, and the long and full tables of cases in the clinical section, as well as the comments upon them, are of lasting practical value. The reprint of the Report is not for sale.

Die Chirurgischen Anatomie in ihrer Beziehung zur Chirurgischen Diagnostik, Pathologie, und Therapie. Ein Handbuch für Studirende und Aerzte. Von Prof. Dr. MAX SCHULLER, in Berlin. Heft I.: Die Obere Extremität. Mit zahlreichen Holzschnitten. Berlin: G. Reimer. 1885.—This is the first instalment of the most complete work on surgical anatomy that has yet been prepared. Not only each region but every section of each region is described with the utmost care and precision, and all the practical surgical bearings of the various anatomical details are pointed out. Muscles, vessels, nerves, and fascie are treated with the same detail and thoroughness, and their connexion with operations, inflammations, and deformities are fully discussed. The work is of great value, and we shall anxiously await the publication of the remaining parts.

LONDON WATER-SUPPLY.—By the East London Water Company's Bill power is granted to raise £300,000 to meet the increased demand for water within their district.

REGINA v. TURNBULL AND NOTTAGE.

AT the Central Criminal Court on Friday, Jan. 15th, William Turnbull, aged sixty, surgeon, and Mary Nottage, aged forty, midwife, were convicted of the manslaughter of Charlotte Louisa Clifford, aged eighteen, by unskilful treatment and criminal negligence; and on the following day were sentenced respectively by the Hon. Mr. Justice Denman to ten years' penal servitude and eighteen months' imprisonment, with hard labour. The facts of the case, as deposed to at the coroner's inquisition and before the police magistrate, have been reported in these columns.* They were to the effect that deceased, who was a barmaid at the Boston Arms, Holloway, went to reside in the house of the male prisoner on Nov. 9th, 1885, and that she died there on Nov. 20th. A few weeks previously she had consulted a medical man on the question of her pregnancy. The friends of Clifford were not communicated with during her fatal illness, nor in fact until she had been dead two days. Turnbull signed a certificate as to the cause of death, alleging that deceased succumbed to "typhoid fever seven days, congestion of the lungs three days." At the post-mortem examination it was evident that pregnancy had advanced to about three months, that an abortion had recently taken place, and that septic metritis and peritonitis had followed as a consequence of the abortion. There were three superficial lacerations in the vagina—one just within the orifice, one at the middle, and a third on the cervical portion of the uterus. Beneath each was some extravasated blood. At the interior fundus of the uterus there was a circular pink patch about an inch in diameter. The organ was in every way enlarged. In the right ovary was an orange-coloured corpus luteum five-eighths of an inch in its smallest diameter. It contained an altered clot in its interior, which broke up into small particles on manipulation and section, for the organ had become softened from post-mortem decomposition. The corpus luteum was quite half the size of the ovary. The medical men who made the inspection found no recent organic disease save that referable to the abortion, and no old organic disease beyond the atrophy or non-development of one kidney, and moderately marked "shaved beard" pigmentation of the intestine—if the latter can be considered as pathological. There was no evidence of typhoid fever; and the congestion of the throat and lungs was such as is usually met with in cases of acute septic poisoning or infection. It will be remembered that, except for an ordinary cold, deceased appeared quite well when she visited her parents, only a few hours previously to her entering Turnbull's house.

The case presents several points of great interest from a medico-legal point of view. That deceased had been pregnant and had recently aborted was not questioned at the trial by the counsel for the defence, who pleaded for an acquittal on the grounds that Turnbull was not cognisant of the facts just mentioned. It is curious to note that, although the indictment charged the prisoners with the crime of wilful murder, and on a minor count with felonious assault, neither the counsel for the prosecution nor for the defence appeared to entertain a middle course between murder and nothing. The question of manslaughter was suggested by the judge, on the ground that the prisoners might be guilty of culpable and criminal negligence, either in not having taken reasonable care to ascertain the exact nature of the illness, or in failing to render such assistance as the case required. It was fortunate for the prisoners that the jury adopted the suggestion and returned a verdict of manslaughter only, for, as Mr. Justice Denman remarked when passing sentence, it was idle to suppose that Turnbull and Nottage were not aware of all that happened from the time deceased went to reside with them until the day of her death. Touching the question of doubtful diagnosis, the medical witness for the prosecution admitted that if extreme care were not taken it might be possible to mistake the peritonitis and the other symptoms from which deceased suffered for typhoid fever, and that the post-mortem evidence was more trustworthy than the symptomatic. This proposition is illustrated by a case of undoubted instrumental abortion investigated at an inquest before Dr. Danford Thomas about two years ago. The abortion had been completed when a medical practitioner of unquestionable repute was called in. For several days he treated the patient for typhoid fever, and on the supposition that she was suffering from that disease sent her into a general hospital, where she died soon after admission. At the necropsy it was discovered that the nates and vulva had been punctured in several places, and the vagina and uterus extensively torn. A professional nurse who attended deceased never suspected that she had aborted. The author of the crime was not discovered. The case was reported fully in our columns. Concerning Clifford's abortion, a juryman asked, "Was it possible for the girl to have procured it herself after she entered Turnbull's house?" The reply was, "Yes, it was just possible, but very improbable." Then as to the lacerations in the vagina, it was admitted by the prosecution that the first might easily have been self-inflicted with the unaided finger, the second possibly so, the third not. According to Taylor, "Any mechanical injury done to the womb always implies interference of some other person in the perpetration of the crime." By this, we presume, is meant injury to the *interior* of the womb, for clearly it is possible for a woman to inflict, with the aid of an instrument, very severe wounds on the vagina and the vaginal portion of the uterus. In his evidence Mr. Pepper admitted that it was impossible to say whether the recent lacerations found in the vagina in the case under consideration were made during an attempt to procure abortion, or to extract the products of conception after an abortion had commenced, or by clumsy instrumentation for cleansing purposes. The inference was essentially a question for the jury, guided as they must be, where the medical evidence is at all equivocal, by collateral testimony; and here it may be parenthetically remarked that a chemise and sheet were discovered in the house on each of which were large blood-stains. As regards the blood and discharge found on the bed and pillows, it was impossible to say that they were not dependent on the advanced state of decomposition of the body—five days after death. It was pure imagination to suppose that they were all due to hæmorrhage from an alleged ulcerated throat, for the stain on the bed was in the middle, and was as large as the outspread hand. It goes without saying that the jury were not satisfied beyond reasonable doubt that an illegal abortion had been procured by someone other than deceased; but looking at the evidence as reported from its medical aspect, it is difficult to convince oneself that such was not the case, especially when read by the light of associated facts. Although it is incumbent on a jury to find according to the evidence, it would be unreasonable to expect them to ignore altogether the consequences of their verdict. Had they decided that a murder had been committed, sentence of death would have been passed on both convicts, for there was nothing to show that Nottage was ignorant of what Turnbull knew of the chief circumstances that transpired whilst Clifford was confined at 146, Hampstead-road; and, as the equitable sentences passed by the judge indicated, there was a wide difference between the guilt of the two persons. On first consideration, the law of criminal abortion seems somewhat Draconic in severity, inasmuch as the illegal act is performed with the full knowledge of its victim, and there is not only no intent to kill, but a strong desire to keep alive. But it must not be forgotten that the woman, especially if she is single, has a powerful motive for assenting to an illicit operation, and that she is generally ignorant of the extreme danger she is running in being a party to its performance. Her judgment is narrowed by ignorance, and perverted by a sense of shame. Very rarely is the accused convicted of the capital offence, and still more rarely is the corresponding sentence carried out. Since the law leaves such wide limits to the jury and such great discretionary powers to the judge, we must expect to meet with convictions and sentences of unequal severity. At the Warwick Summer Assizes in 1885, the prisoner, a medical man named Millerchip, was sent to penal servitude for ten years for *attempting* to procure abortion by means of a Lawson Tait's uterine dilator, exactly the same punishment awarded to Turnbull. In each case the sentence was proportionate to the verdict. Legally and technically we subscribe to them, though morally we might hesitate to do so.

THE LANCET.

LONDON: SATURDAY, JANUARY 23, 1886.

THE Metropolitan Asylums Board has sought the advice of counsel as to the course it should pursue with reference to the irregularities in connexion with the Eastern Hospitals, and has been recommended to take no further proceedings. The subject may therefore be considered to be terminated, and the ratepayers have not even the consolation of knowing that due punishment will be awarded to those who have been guilty of practices which have led to the improper expenditure of large sums of public money. The circumstances which have recently been brought to light are sufficient to shake to the foundation any remaining confidence in the present form of London government, and to drive from their posts the remnant of good and able men who have, under the great disadvantage of a faulty system, laboured for the public good.

The Metropolitan Asylums Board has been an anomaly from its first creation. Elected from the Boards of Guardians, it had placed upon it duties which necessitated an enormous expenditure, over which the ratepayers have but little, if any, control. Even the Managers themselves are not free agents, but in practice are compelled to do the bidding of another board which is absolutely independent. The duty the Managers were originally appointed to perform was limited to providing accommodation for certain paupers suffering from infectious disease, or who were imbeciles. The duty which has been thrust upon them is nothing less than to undertake the charge of nearly all persons suffering from infectious diseases, and who need hospital treatment, throughout the whole metropolis. They have not been found wanting in desire to meet the demands of the largest city in the world, but they have not been provided with adequate powers or organisation necessary for the requirements of a town of moderate dimensions. Hence many and fatal mistakes have been made, mistakes which have not only taxed the pockets of the ratepayers, but have cost the metropolis more lives than are often sacrificed during one of our military campaigns. Disease has broken out in the neighbourhood of the hospitals again and again, yet it has been argued that this is no concern of the hospital-providing authorities. It is their province to carry out an Act of Parliament; the effects of this action are the business of no one. It has remained for individual ratepayers to show in courts of law that the aggregation of cases of small-pox is pregnant with death to many, and that public health considerations of the most serious importance are involved in every detail of hospital provision for infectious diseases. Few greater misfortunes could have befallen London than that this grave subject should have been dealt with as a branch of Poor-law administration. It has prevented the chief object of these institutions from being recognised. It has led to complete forgetfulness of the fact that the care of sick persons is less important than the prevention of their sickness. It has almost seemed as if the existence of hospitals was the first consideration, and the existence of the community in which they are placed, and by whom they are maintained, but of secondary importance.

There have been ample indications that the Managers are not satisfied with their position. As long ago as nine years the late Dr. CORTIS, a member of the Asylums Board, pleaded at length in our columns for the reconstruction of the Board of Managers on such a basis that they should be brought into direct relation with the various sanitary authorities. The whole question has been considered in detail by the Managers, and circular letters embodying their views have been addressed to the central and to the various local authorities. Again, as recently as last year, the Managers, in making their arrangements for providing hospital accommodation for cases of cholera, strained a point to seek advice as to the health requirements of the metropolis. Nevertheless, there is no material change in their position, and, as a result, London continues to suffer.

The only complete remedy is to be found in legislation. The provision of hospital accommodation for infectious disease must be a branch of the sanitary administration of the metropolis, if the calamitous occurrences of the last fifteen years are not to be repeated. Parliament has begun its work during the present week, and upon the opportunity for its members to consider the better government of London, in whole or in part, will depend the welfare of numbers of persons. If we were pleading for the lives of animals lower in the scale than man, or if we were protesting against loss of life from some more violent cause than disease, we are convinced that our utterances would not be in vain. There can no longer be excuse for further delay. The investigations of Mr. W. H. POWER have amply confirmed the decision at which a court of law arrived some six years ago, and every year has added, and is still adding, to the list of those who lose their lives from the continued existence of a bad system. This needs to be clearly appreciated, for it is only when the evil it inflicts upon many is fully understood that we can hope it will receive the attention of the legislative body.

OUR columns are open to every fair and honest representation on the subject of Hospitals. Our predominant note about these institutions is one of praise and gratitude. We cannot imagine medical science flourishing without them. Medical education would be infinitely impaired by any change that reduced them to mere workhouse infirmaries. One huge consolation of the poor would disappear—the hope of relief from the highest members of the profession in cases confessedly out of the common beat of practice, and which, occurring in the rich, would command the attendance of consultants and specialists of every kind. By the beneficent provisions of our great hospitals the lot of the poor in their straits of accident or disease is somewhat assimilated to that of the rich. The distinction of the two classes in the matter of physical suffering is so far obliterated by the kindly action of the rich, which not only secures great advantages to the poor, but improves the art to which one day or other the richest man must be indebted. We adhere without abatement to our high opinion of a British hospital supported by voluntary contributions, and to which the working classes are admitted without too much inquisition in their

days of need when grave disease presses. But, as we have said, every fair and honest representation about these institutions shall have a place in our columns. Accordingly we are frequently receiving complaints that these institutions are abused, and one correspondent lately has written us a letter in which he speaks confidently of having discovered the real secret of hospital distress, and the only means of cure. He goes at once to the root of the matter, and declares that hospital *abuse* is the chief explanation of hospital impecuniosity. Mr. MCDONAGH avers that there is no adequate discrimination of fitness of applicants; but he goes much further and maintains that the total disregard of supervision is fostered by the medical staffs of hospitals, whose interest it is to attract a better class of patients, who are found out as unfit, and then invited to call the next morning at the physician's or surgeon's private house, and mulcted of a fee of a reduced character. He is particular in his statement, and says that "many patients of his own who have been able to pay him bills of pounds subsequently received free advice at a general hospital." Were such a system as general as Mr. MCDONAGH represents, it would doubtless squander the money of the benevolent, it would operate disadvantageously and unjustly towards medical practitioners, and it would demoralise the unfit recipients. It was not to be supposed that such statements would pass unchallenged, and they have been met with much point and dignity by a "Physician to a General Hospital," in THE LANCET of last week, who vindicates the motives and the work of his class in hospitals; who avers that there is, at least in some hospitals, a most careful supervision of out-patients; and whose conclusions as to the abuse of the out-patient department—in which, by the way, very little of the hospital money is spent—differ very much from Mr. MCDONAGH'S. He finds that very few of the patients presenting themselves for advice were in a position to pay the fees of any medical man, however moderate. This has certainly been found in other hospitals also. It does not necessarily follow, either, that Mr. MCDONAGH'S chance of getting a bill of pounds from a patient is diminished by the fact of the patient in an emergency or in an exceptional case seeking assistance in a general hospital. The details of such cases would have to be stated with much more minuteness to establish Mr. MCDONAGH'S point. He may have got his account paid because the hospital relieved his patient of a certain liability. We publish to-day another letter from Mr. MCDONAGH reasserting his position, and with some more detail of statement.

What system is not abused? Is the provident system not abused? Can anything be more disrespectful to the profession or more unjust to its members than some of the experiments that are now being made in the name of providence? The Liverpool papers have lately contained an able letter by Dr. RENTOUL of very much the same tone as Mr. MCDONAGH'S, and lauding some provident arrangements which seem to us very far from satisfactory, which cover the most irregular and inadequate remuneration of medical service, and which often make the medical man not only a sort of drudge, but a source of profit—a sort of money-maker—for a Friendly Society. A list of forty-two Provident Medical Societies is given, with a membership of 224,267 and an income from benefit members of £40,152. In other words, no bill of pounds is forthcoming, as in the case of Mr. MCDONAGH'S patient, who gets occasional relief at a hospital, and presumably on other occasions contracts with Mr. MCDONAGH a debt of pounds; but all medical indebtedness of these thriving artisans and their families is discharged in the handsome sum of 3*s.* 6*d.* a year per member! The most varying remuneration is given in different places. Thus, in the Metropolitan Provident Society 25,000 people are attended for £3290, whereas in Northampton only 16,000 people are attended for the larger sum of £3309. The Manchester Medical Association is held up to admiration by Dr. RENTOUL; and its 16,000 members, a similar number to that of Northampton, raise £4006, which looks pretty well. But how much of this sum finds its way into the pockets of the medical men? Only £1865. Is it not an unreasonable thing that the medical men, whose work makes or draws £4000, receive less than the half of it? We really cannot join in Dr. RENTOUL'S admiration at such a result, or think it, without explanation, one to be copied. We think it possible, and we devoutly hope, that many medical men of Manchester, having no connexion with the Association, but having honourable relations with the honest poor, get more recompense from them than this, even if they occasionally, and under stress of disease or diathesis, try what the hospital physicians can do for them. We do not wish it to be considered that our hospital system is perfect; but some developments of the Provident Societies are little more creditable, and they give a false sense of pride and independence to the members. Let us work steadily for the improvement of both systems, without denying that each has its place in an old and complicated civilisation like our own.

ANOTHER outbreak of disease in which milk is alleged to have been the vehicle of infection is reported by Mr. WYNTER BLYTH as having occurred in the metropolis. It appears that a group of scarlet fever cases were reported from the neighbourhood of Dorset-square, Marylebone, and preliminary investigation pointed to the fact that the only connecting link in common to those attacked was the use of milk from the same dairy. It next appeared that a lad at the dairy in question had also had scarlet fever, but from the dates of the several attacks it became evident that he was not the cause of the outbreak, but that he too had been infected by the milk. The milk supplied by this dairy came partly from Hendon and partly from Swindon. With the aid of the medical officers of health of those places, it transpired that, whilst no suspicion attached to the Swindon Farm, the one in Hendon was seriously implicated. The Hendon milk was transmitted from three separate barns or sheds to three separate dairymen in London, and a further stage was reached when it was ascertained that only the milk sent out from one of these sheds was involved in suspicion; but in the mean time other cases of scarlet fever were ascertained to have occurred in families who derived their milk direct from the Hendon farm. At this stage the evidence was so strong against the Hendon milk that the farmer was requested to stop the supply. He complied with the request, and threw away part of that which would otherwise have gone to Marylebone; but, apparently not believing in its harmful influence, he gave the remainder

away to certain poor people, and within a few days eight of the families so receiving it were also suffering from scarlet fever, some patients sickening within about forty-eight hours. So far, it cannot be ascertained that any person employed about the farm had suffered from any affection resembling or having affinity with scarlet fever, but it is stated that one of the cows is "suspect." It will be remembered that on several previous occasions scarlet fever has been distributed through the agency of milk, and that cows suffering from some apparently trivial ailments have appeared in some mysterious way to have been directly concerned in the spread of the infection. Mr. POWER, of the Local Government Board, is the inspector who has specially pointed to the possibility of there being some connexion between certain bovine affections and the distribution of scarlet fever to the human subject through the agency of milk, and we are glad to learn that from the first he has been engaged in investigating the circumstances of this outbreak, and that the "suspect" cow has been purchased and sent to the Brown Institution with a view to an exhaustive investigation by Dr. KLEIN.

Until the official report on this interesting outbreak is issued, it would be premature to express any further opinion as to its actual origin and method of diffusion. But one point merits attention. It has for some time past been hoped that proper sanitary control over dairy farms would suffice to prevent milk from such farms becoming a means for the diffusion of disease. But here we have to deal with what is admittedly a "model" farm, having excellent water-supply and means of drainage; and the fact of scarlet fever being diffused by means of the milk sent out from it should go to show that, however valuable and necessary strict sanitary control over dairy farms may be, it can never suffice altogether to prevent the spread by means of milk of obscure diseases, such as diphtheria and scarlet fever. We therefore repeat the advice which we have more than once given, that all milk should be boiled or otherwise cooked before it is used for human consumption. In this respect continental countries are in advance of Great Britain, where alone large quantities of uncooked milk are regularly used as food.

WE have to deplore cases that have recently come before the Law Courts, in which our profession has been disgraced by some of its members. There are, and always will be, "black sheep" in every flock. The clerical, the legal, as well as the medical profession have their *mauvais sujets*, and the profession of arms is not wholly spotless, we believe; nevertheless, there is no comfort to be derived from the fact that vice has its representatives everywhere. The medical body ought to be, and we believe is, especially sensitive on the subject of honour and morality. Its members occupy a unique position; they stand in an altogether exceptional relation to the community. They are in a distinctly personal sense the trustees of purity and character. They know more of their clients' secrets than any other class of men can possibly know. A man tells the minister of religion whose advice he seeks and the lawyer he instructs just as much or as little as he pleases of his inner life and most private affairs; but before his medical attendant he stands unmasked, and no effort of his can conceal the state of his health, the chances of his living or dying, or the manner of his life, from the expert practitioner of medicine. It is so with men and women alike, of all ranks and conditions. The medical adviser is the one "other person" to whom all secrets are discoverable, and from whom practically nothing can be hid. This being so, it seems strange that society does not require heavier bail and stronger guarantees for the good conduct of the men it permits to practise medicine in its midst than are now deemed desirable; above all things, it certainly appears inexplicable that the community, as represented by the State, does not insist that the governing bodies of the profession, the *Colleges*, should actually exercise such control as they claim to have over the practice of their members and licentiates. There are Colleges of Physicians and Colleges of Surgeons, and if only these distinctly *professional* bodies were anything more than mere licensing faculties, they would be powerful agencies of supervision and control. In the old days the College of Physicians of London had the power of reprimanding its Fellows, Members, and Licentiates, and could, if need be, commit to Newgate any person either daring to practise within its jurisdiction without its leave, or so practising as to transgress its bye-laws. With the growth of a liberal spirit and *régime*, which may readily degenerate into licentiousness, the prerogative of control has been restricted until it has become little more than a name. Meanwhile the College of Surgeons, which never distinguished itself by any care for the honour of the profession, has come to be wholly absorbed with squabbles about collegiate policy taking place within its own walls, and is far too busy to think of what is going on without, even though membership at Lincoln's-inn is now, and has for many years past been, the commonest qualification of general practitioners.

We are convinced that the time has arrived when it is urgently necessary that the Colleges should be compelled, if not by the State and community, by the profession itself, to assume the position and discharge the responsible duties of Boards of Control. It is intolerable that the social credit and common repute of the medical body should be progressively reduced by the nefarious proceedings of qualified quacks and unscrupulous professional practitioners. We hear a good deal about the necessity of exposing and repressing the unqualified pretenders whose lawless trade in physic is supposed to clash with the interests of qualified practitioners. It is high time that something was said, and to the purpose, about internal organisation and control. We venture to think greater injury is done to "our interests"—yes, even our more selfish interests—by the degradation of the profession in the esteem of the public, which results from the perpetually recurring scandals arising in connexion with the misdoing of qualified practitioners, than by the most nefarious deeds of outsiders.

ALTHOUGH nothing of a very definite character was decided upon at the Council meeting last week, it is satisfactory to learn from their proceedings that at least some members of the Council feel that matters cannot be allowed to remain as they are. Mr. MACNAMARA'S motion (seconded by Mr. THOMAS SMITH), "that a committee be appointed to ascertain and report to the Council the views

of the Fellows as regards the advisability of Members being allowed to vote for the election of Fellows as members of Council," was temporarily postponed until after the report of the Committee on the proposed changes in the conditions on which the Fellowship is at present granted had been received and disposed of. Neither of these motions, however, whether passed in their present or in any altered form, will meet the requirements formulated at the late meetings of the Fellows and Members.

Mr. MACNAMARA'S motion, if passed, can do no sort of harm, but it is insufficient. The Association of Fellows, as the mouthpiece of a considerable and influential section of the Fellows at large, has decided not only that Members shall *vote* for the election of *Fellows* as members of Council, but also that the Council shall *include* a certain proportion of *Members* among its number. Hence it is to be regretted that Mr. MACNAMARA has not included in his motion the latter question also.

As regards Mr. HUTCHINSON'S motion to widen the basis upon which the Fellowship is obtained it is premature to speak, seeing that the subject is still under consideration. But if there is any truth in the whisper we have heard, that it proposes that some fifty Members be elected to the Fellowship without examination every year, we may say at once that the proposal does not meet with our approval. In the first place, we doubt very much whether Members would care to accept the Fellowship on such terms. In the next place, we doubt whether fifty Members really eligible for a diploma so strictly surgical could be found year by year. The chief effect of such an arrangement would be to thin out the ranks of the Members and take away the best and most representative men. It would give these men a higher title without ensuring any wider knowledge of surgery, and would thus defeat the object for which the Fellowship was instituted—"in order more effectually to promote and encourage the study and practice of the said art and science of surgery." The selection of the fifty recipients would be a most invidious task, and would probably lead to much jealousy and disappointment. We are far from thinking that the mode of granting the Fellowship is satisfactory. The great hindrance to its acquisition at present is not the *surgical* but the *anatomical* part of the examination; and although some beneficial changes have been effected within the last year or two, there is much room for improvement even now.

Moreover, both Mr. HUTCHINSON'S and Mr. MACNAMARA'S motions leave the *principle* for which we have so long contended quite untouched—the right of all Members of a large Corporation like the College of Surgeons to a voice in its management. That twenty-four Fellows, members of Council, should absolutely control the affairs of a corporation numbering over 18,000 educated men, is an anomaly which has already existed too long, and which in the interests alike of the profession, of the College, and of society at large must be put an end to. We must once again impress on the College authorities that our arguments for an extended franchise do not rest on the fitness of a few to be made Fellows, but on the principle that a corporation should be governed by those through whom and for whom it exists.

Annotations.

"Ne quid nimis."

THE UNIVERSITY OF LONDON.

A MEETING of Convocation was held on Tuesday last, to consider no less than sixteen different questions, as set forth on the agenda-paper summoning the meeting. The chief part of the sitting was occupied with a discussion on a revised syllabus for the matriculation examination recommended by the Annual Committee to take the place of the one now in force. A comparison between the two occupies six pages of a special report, and as the views of no two graduates agree as to what subjects, much less details, should form part of the examination, and many teachers look upon it as a finishing examination for a schoolboy, instead of a necessary preliminary to a degree, the utter confusion of the discussion can be imagined. after a tedious debate, in which probably some twenty speakers took part, the revised syllabus was recommended for adoption without having undergone any alteration. The Senate should obviously have taken the initiative in such a question as the alteration of its entrance examination, and should have been able to ask the assistance of an authoritative Board of Studies, instead of being dependent on the energy and knowledge of one or two individual graduates, and giving an opportunity to every member of Convocation to air his pet educational crotchet. A motto for the University, a thesis for the Doctorate in Law and in Medicine, and a large alteration in the regulations for the LL.B. degree, were in turn brought forward, and the House was counted out at a little before 9 P.M., having spent four hours in proving its unfitness as a working element in the University, and the folly of giving to it in its present form any increased powers. It may be difficult to find a fitting motto for the University, but one for Convocation immediately suggests itself: "Vox et preterea nihil."

HOME AND HOSPITAL TREATMENT OF INFECTIOUS DISEASES.

NOTWITHSTANDING the noteworthy statistics of small-pox mortality around small-pox hospitals issued by the Medical Department of the Local Government Board, no good reasons have yet been urged for doubting the generally beneficial effect on public health of hospital treatment of infectious diseases. When, however, the effect of such hospital treatment upon the proportions of death and recovery among the patients treated comes under consideration, difference of opinion is often expressed, and the need for satisfactory statistics on this point becomes patent. Dr. Hime, the medical officer of health for Bradford, Yorks, in his report on the health of that borough in 1884, urges, on the basis of certain statistics which he gives, "the folly and cruelty of keeping such cases (scarlet fever) at home, to the danger of the public and with such a great chance of killing the patients." We wish, in the interest of public health, confident as we are of the value of hospital isolation of cases of infectious diseases in large towns, that we could accept Dr. Hime's figures as a satisfactory basis for calculation and deduction. The mean percentage of deaths from scarlet fever among the cases treated in the Bradford Fever Hospital in the three years 1882-3-4 did not exceed 8·6; whereas Dr. Hime gives figures showing that the mean mortality among cases treated at home during the same three years was 14·4 per cent. We regret to find that no satisfactory explanation of these figures accompanies the table. There is no reason to doubt the accuracy of the percentages of mortality in the hospital, although from a statistical point of view the value of the figures would have been increased if the facts upon

which the percentages are based had also been given. It has generally been admitted that the recorded mortality of infectious diseases is greater in hospital than in cases treated at home, and this has generally been referred to the probability that the worst cases are sent into hospital. It becomes highly important therefore to know how Dr. Hime has obtained his rates of mortality among cases treated at home. The unusual character of these statistics suggests that he has given the proportion between the number of cases notified under the compulsory clauses of the local act, and the number of deaths registered out of the Fever Hospital. If such be the case, it is obviously more than probable that a considerable proportion of the milder cases of these diseases are not notified, the effect of such omission being to unduly raise the apparent mortality of cases treated at home. The importance of trustworthy statistics on this point, and the patent difficulties in the way of obtaining them, increase our regret that Dr. Hime has not more fully explained the construction of his remarkable statistics.

THE PRINCESS OF WALES.

To the secrecy which is observed whenever a slight ailment indisposes any member of the Royal Family is to be attributed the scare which was created by the announcement that the Princess was suffering from diphtheria. A sore-throat may or may not have a diphtheritic tendency, according to the nature of the surroundings of the patient. While theoretically the difference is fully recognised, it is not at all times possible to mark the exact line between the simple and specific affection. This difficulty is often increased in proportion to the slightness of the attack, yet on to a slight and simple sore-throat a diphtheritic taint may be engrafted. It is from this fact that anxiety is created whenever any member of the Royal Family is reported to be suffering from sore-throat. The interest taken in everything concerning the Princess of Wales is scarcely less than that taken in Her Majesty, so thoroughly has Her Royal Highness ingratiated herself in the affections of the people. Nor can this be matter of surprise when the many excellent qualities, both of wife and mother, which are typified in the Princess, are borne in mind. This interest in the well-being of members of the Royal Family is not a matter of idle curiosity, but is an expression of the devotion of the people, in encouraging which there can be nothing but good. The secrecy observed in reference to their slight ailments, and the ambiguity of bulletins in cases of severe illness, should in the future be abandoned.

SPLENIC HYPERTROPHY WITH ATROPHY OF ADRENALS.

DR. ROBERT SAUNDBY, physician to the Birmingham General Hospital, has just recorded, in the Transactions of the Pathological Society, a very remarkable case of hypertrophy of the spleen with atrophy of the supra-renal capsules. A young lady, who was only eighteen years of age when she died, had suffered for three years from dark skin, progressive anæmia, and gradual splenic enlargement. She passed dark-coloured urine, but this had been habitual with her since birth. This dark colour was due to indican. There was never any leucocythæmia or marked oligocythæmia, but the red corpuscles were deficient in hæmoglobin. After death, which resulted from an attack of vomiting, of which the patient had had several at intervals, the spleen was found to weigh sixty-six ounces. The supra-renal capsules weighed eighteen grains and ten grains respectively, and under the microscope showed simple atrophy of their substance. So far the case may be regarded as one of Addison's disease, due to simple atrophy of the supra-renal capsules, of which Hadden, Coupland, and Barlow have published examples. But the remarkable feature of this case is that the father died at the age of thirty-seven with the same symptoms, and was found to have a spleen which weighed seven and a half pounds; while a brother, still alive, presents the same series of phenomena. This coincidence suggests that the atrophy of the capsules has been in each case congenital—a view which is supported by the microscopical appearances of the capsules, in which no trace of inflammatory action was observed. The enormous splenic enlargement present in all three cases distinguishes them from ordinary cases of Addison's disease, in which hypertrophy of the spleen, though frequently observed, reaches very moderate dimensions. The fact that there should be this tendency, even in ordinary cases, to enlargement, indicates, in Dr. Saundby's opinion, that these enormous spleens depend upon the long continuance and extreme degree of the capsular affection. It is noteworthy that Dr. Saundby could discover no change in the structure of the semilunar ganglia, and that, with the exception of pigmentary deposits, the organs generally were free from obvious alterations.

EVENING CLASSES FOR THE YOUNG.

WHILE supporting the admirable movement in favour of evening classes of a recreative and instructive character to supplement the earlier educationary efforts of the School Board, the Bishop of London, a few days ago, alluded to the value of these classes as opportunities for the employment of spare time in the case of boys thrown on their own resources for amusement after the hours of daily labour. This is a most important matter. There is an intermediate stage in the life of every individual which is by no means a "dead-point," but, on the contrary, is signalised by the dawn of special energies which need to be subordinated by proper influences. The mind never so greatly needs to be developed and cultivated as when it is in danger of being dominated by that part of the nature—the emotional—which stands in closest relation with the lower animal instincts and sensibilities. To throw a boy-man or girl-woman entirely on individual resources for amusement at such a crisis is to do more than can be easily accomplished at any other juncture or period of life in the downward line of retrograde demoralisation and dissolution. We quite agree that music and drawing should form the cardinal subjects of instruction at these evening classes, because they are especially instructive; but lessons in the rudiments of natural science—chemistry, zoology, botany, and the like—might be added, and the mind trained to self-respect and self-improvement by the legitimate stimulation of that desire for knowledge which is itself regenerative when not over-developed or mischievously perverted. But the movement must be allowed to proceed on simple and natural principles without any "goody-goody" or, still worse, sectarian bias, if it is to succeed.

VERTEBRAL ARTHROPATHY.

THE author of a paper in the *Journal de Médecine de Bordeaux*, No. 24, records the following case as the first one of authentic vertebral arthropathy of tabetic origin. He observes also that it is curious to notice the presence of osseous and articular lesions in the absence of other severe tabetic symptoms. A man aged fifty-six came under observation on May 6th, 1885, for an affection of the right big toe that interfered with progression. He had met with many accidents, some of a severe nature, but it was on account of his great toe alone that he sought assistance at the hospital. One day, fifteen years previously, when about leaving home to go to his work, he was suddenly seized with weakness, which, commencing in the trunk, invaded the lower limbs; this weakness led to a change in his occu-

pation—from a cooper he became a tailor. About the same time he began to suffer from pains that shot through his limbs. Within the past five years incoördination of gait had set in, his sight became bad, and the pains increased in frequency and severity. In 1883 it was observed that his stature had decreased to the extent of at least twenty-three centimetres, and he was unable to walk without assistance. On admission to the hospital, under the care of M. Denucé, there was dry gangrene of the big toe, for which resection was performed; this was followed by gangrene of the foot, necessitating amputation of the leg, to which the patient succumbed. The interest of the case turns chiefly upon the condition of the vertebræ and hip-joints. The capsule of the hip-joint was much thickened and irregular; three small bony fragments were adherent to the capsule. The head of the femur had totally disappeared, as well as a large part of the neck; in its place there was a smooth vertical surface, shaped like a punch, on the anterior surface of the femur, and the great trochanter was much flattened. The spinal column was much curved laterally. The osseous skeleton showed in many places rarefaction and in others genuine osteophytes. Depressions and rugosities were very marked on the vertebræ; many of the vertebræ were much flattened, and their upper and lower borders markedly projected.

"MEDICAL EDUCATION IN ENGLAND."

MEDICAL Education in England is the subject of three long and interesting letters by Professor Theordor Puschmann which have recently been published in the *Allgemeine Zeitung*. The writer naturally devotes the greater part of his space to a description of the nature and working of the English system, but he also indulges here and there in comparisons between the English and German systems, which are worthy of attention. He is struck, for instance, by the fact that our hospitals owe their foundation to the beneficence, and are still supported by the contributions, of private individuals; whereas in Germany all such institutions have been founded and are supported by the municipality or the State. Englishmen are so familiar with these creations of individual effort that they do not see anything peculiar in them; the foreigner, however, invariably regards them as the most surprising, and perhaps the most enviable, thing which distinguishes England from the rest of the world. The medical students in this country, too, are noticed as being a stronger and healthier set than they are in Germany. This is attributed to the national addiction to out-door exercises; and Professor Puschmann advises his fellow-countrymen who are studying for the profession to cultivate similar pursuits. The essential differences which he finds between the two systems of medical education are reducible to two. In the first place, the general education of the English student is secured only by the obligation to pass the not very difficult preliminary examination. On the other hand, the German student has to spend nine years at the gymnasium, and to pass that bugbear of German boyhood, the "Abiturienten-Examen." Perhaps the English method does not sufficiently guarantee the possession of a due amount of general culture, but the German system is terribly rigid and inelastic. Prof. Puschmann inclines to a compromise between the two. The other great difference is the stress which the English system lays throughout on practice. It may be said that German students get their training in the universities; English students get theirs in the hospitals. The practical end to which all his labours are directed is kept always before the mind of the English student; the lectures he hears are animated by the constant reference to practice, and are therefore always followed with interest. The German professor, on the contrary, does not condescend to this lower level, and keeps well in the region of theory. That the German system does not adequately recognise that medicine is an art is evidently the opinion of Professor Puschmann; and he regrets that the old Bavarian system under which the young surgeon or physician had to complete his training as assistant to a medical man in large practice or in a hospital before he was allowed to practise on his own account, has given way to the Prussian system, which came in with the establishment of the German Empire. "The English," he concludes, "have accomplished wonderful things in other spheres of labour; perhaps in this sphere also we may find something worth our imitating."

INTRA-PULMONARY ANTISEPSIS.

AMERICAN physicians have employed iodoform dissolved in olive oil and ether as an antiseptic injection in the treatment of pulmonary cavities. M. Lépine has advocated the use of weak solutions of corrosive sublimate. M. Gouguenheim has taken up the subject again by experimenting on the cadaver. He believes that the first and second intercostal spaces in front are suitable sites for penetrating to cavities at the upper part of the lung by means of a Pravaz needle; the axillary line and the angle of the scapula are also available sites. The sternal end of the intercostal spaces ought to be avoided. Clinically, the injections ought to be made slowly, in order to prevent cough and hæmoptysis; the liquid should be at the temperature of the body. The treatment may be carried out for a long period. M. Gouguenheim made almost daily injections for a month, and the necropsy revealed in fatal cases no lesions that could be attributed to the injections. The strength of the solution was either 1 part of the sublimate to 2000, or 1000, or 500. One-half to three milligrammes of sublimate in a syringeful of liquid was the quantity injected at each sitting. After the injection pain was but slight, but cough at times violent; hæmoptysis was exceptional and transitory. Generally speaking, an improvement in the physical signs of auscultation was observed at the site of injection, and expectoration was often diminished. We do not think it has yet been shown that any decided benefit has resulted from such intra-pulmonary injections, and in view of the circumstance that phthisical cases even in their final stages not infrequently manifest marked temporary improvement, not only in symptoms but also in physical signs, we must question whether M. Gouguenheim has shown that this treatment yields "most encouraging" results.

BUILDING ON DISUSED BURIAL-GROUNDS.

A CASE of much interest from its bearing on the disposal of disused burial-grounds has just been decided in the Court of Chancery. A piece of land belonging to the trustees of St. Saviour's Rectory, Southwark, was sold by them last year to a firm of builders. It was then found that by the Disused Burial-grounds Act of 1884 buildings could not be erected on the ground in question, while a complication was introduced by a clause in the said Act, which exempts from its control "any burial-ground which has been sold or disposed of by Act of Parliament." The land in dispute had been received by the trustees from the churchwardens of St. Saviour's, though not by purchase, in 1883, an Act confirming their possession, and providing that the land might be sold for building purposes. Then came the prohibitory Act of 1884. The trustees, relying on their private Bill, sued the purchasing firm to complete their purchase, which, on examination of the later Act, they had refused to do. The Vice-Chancellor, however, ruled that the Transfer Act of 1883 did not refer to a sale or disposition within the meaning of the excepting clause in the Act of 1884, and dismissed the suit with costs. The

decision in this case has turned upon a delicate point of law, but its justice is apparent. The legal process by which an exchange was effected for their mutual convenience between two similar bodies associated for a common charitable purpose in the present instance could not in any sense be regarded as equivalent to a sale. Practically, the ground could hardly be said to have changed hands. The building firm on their part, though apprised of the various Acts relating to their purchase, could scarcely be expected to decide the point of law involved when that divided experienced legal opinion and was not clear to the vendors themselves. We have in former articles discussed the question of building on land which has been used for burial. Experience has proved that such a proceeding is dangerous to health, as is also the mere breaking up of such ground without due sanitary precautions. In our opinion, the trustees of St. Saviour's Rectory cannot do better with their present unprofitable possession than hand it over to the Public Gardens Association to form one other place of recreation for the inhabitants of London.

STEALING, KLEPTOMANIA, AND MORBID FORGETFULNESS.

JUST as there is a wide practical difference between stealing with a criminal motive and the pilfering resulting from a morbid impulse, so there is a distinction to be drawn between kleptomania, properly so called, and morbid forgetfulness of the sort which may lead its subject to perform acts apparently felonious. Thus, for example, it is quite conceivable that a morbidly forgetful person may take up articles in a shop and carry them away unpaid for without the least intention of purloining or cheating. Obviously, every individual case of this class must necessarily be judged on its merits, or great wrong may be done by conniving at the perpetration of a grave offence under a particularly thin disguise. Nevertheless, the fact should be recognised that this morbid forgetfulness is a true explanation of many otherwise mysterious phenomena of human action; and it is an affection not confined to the rich and well-to-do classes, but common to the population as a whole; so that the poor houseless depredator should have the benefit of the doubt, as well as the weak-minded possessor of a comfortable home.

ISOLATION ARRANGEMENTS AT LIVERPOOL.

THE Town Council of Liverpool have taken another important step towards the solution of the difficulty as to the isolation of the infectious sick, which has so long been a prominent want in the sanitary administration of the city. Having, in the face of an epidemic of small-pox, provided themselves with an excellent small-pox hospital, they are now proceeding to provide means for the isolation of other infectious diseases; and on the 16th inst. a public inquiry was held at the Town Hall by General Carey and Dr. Thorne Thorne, Inspectors of the Local Government Board, as to a loan of £100,000 which the Corporation require for carrying their object into effect. The scheme, as described by the town clerk, by Dr. Hamilton, chairman of the Sanitary Committee, and by the city architect, is to acquire a site in the southern part of Liverpool on which to erect a hospital for sixty beds, and to work this in connexion with the Netherfield Hospital, which contains eighty beds, and is situated in the northern area. The latter hospital, being held by trustees, has to be acquired by a special Act of Parliament. In addition to the 140 beds thus provided for acute cases, it is proposed to purchase one or other of two estates lying at the respective distances of ten and thirteen miles from Liverpool, on which to erect a convalescent hospital, to which the patients could be rapidly drafted either by railway or in ambulances. The proposal met with the usual objections which are raised to all such hospitals; but, in addition to these, it is clear, from the evidence given by Dr. Stopford Taylor, that he does not favour the scheme. He maintains that it is most inadequate, and that, quite apart from small-pox accommodation, Liverpool should possess within its limits at least 500 beds for infectious diseases; and he brought forward statistics showing that the average number of infectious cases which occur annually in the city was some 14,000, a total which could not be dealt with by the proposal of the Corporation. He also advocated an alternative site within the boundaries of the city, where such accommodation as he thought necessary could be secured, and in this he was supported by Dr. Flinn. On the other hand, Dr. Gee and Dr. Carter, representing the Liverpool Medical Society, supported the views and action of the Corporation. The conflict of medical opinion is unfortunate, but we see reason why both views should be entertained. The medical officer of health knows better than anyone else what are the real wants of Liverpool, and we can understand his opposition to a scheme which will only partially meet those wants; whereas, on the other hand, any substantial step towards removing a grave blot on the sanitary administration of the city may well receive the approval of the medical profession. The scheme will now be submitted to the Local Government Board, and their decision on it must be awaited.

THE FEARS OF CHOLERA AT GIBRALTAR.

AN alarming telegram has been circulated by a news agency concerning the state of affairs in the immediate neighbourhood of Gibraltar. According to this brief message, the persons who died of cholera at the Spanish lines—that is, within some few hundred yards of the English sentinels—have not been properly buried. An offensive odour is consequently stated to prevail in this district, and great fears are entertained that it may occasion a fresh outbreak of the disease. The district in question, commonly designated as the Lenia so as to distinguish it from the English lines, is practically a suburb of Gibraltar, for nearly all its 13,000 inhabitants are dependent on Gibraltar for their subsistence. During the summer the cholera broke out here. At first its existence was denied by the Spanish authorities, so that the official figures ultimately given do not represent fully the extent of the epidemic. According to these statistics, there were in all 416 cases and 191 deaths. Considering that half the population had fled, and that there were many more cases than those officially recorded, it may be said that the Lenia suffered somewhat severely. The fact that the epidemic did not spread to Gibraltar speaks volumes in praise of the general sanitation of the fortress. Nevertheless, many of the inhabitants of the Rock were greatly alarmed. A formidable outcry was raised in favour of establishing a cordon to cut off all communication with Spain. Petitions were even sent to England complaining of the conduct of the authorities in this respect, and demanding that orders should be given by the Colonial Office to isolate Gibraltar. There appears reason to believe that efforts have been made to exaggerate the dangers that menace Gibraltar from without; and certainly it seems somewhat strange that the nuisance caused by the cemetery should not have been noticed before the coldest month of the year. Nevertheless, a cemetery in the sandy, porous soil of this country, situated near to wells supplying drinking-water, constitutes a serious danger which, however, no amount of cordons can modify. In this case the infection would travel below, and not above, ground. Cremation, and not cordons, would be the most logical remedy. At the neighbouring village of Campo-

mento it was noticed that every fresh outbreak of cholera followed upon a downfall of rain. The germs in the soil seem to have been carried by the rains to the wells. If, as is now stated, the interments have not been performed with due precautions, we have, in such neglect, another reason to fear a recrudescence of cholera early next year. To all who know how such matters are managed in Spain these apprehensions will seem but too well founded.

DAMP BEDS.

THE sad death of Mr. Maas, the well-known tenor, calls attention very painfully to the peril of sleeping in a damp bed. As a matter of fact, this peril is of the greatest, and it is almost ever present. The experienced traveller rarely hazards the risk of sleeping between sheets, which are nearly sure to be damp, until they have been aired under his personal supervision at a fire in his bedroom. If this be impracticable, he wraps his rug around him or pulls out the sheets, and sleeps between the blankets—a disagreeable, but often prudent, expedient. The direst mischief may result from the contact of an imperfectly heated body with sheets which retain moisture. The body-heat is not sufficient to raise the temperature of the linen or calico to a safe point, and the result must be disastrous in the extreme, if, as is sure to happen, the skin be cooled by contact with a surface colder than itself and steadily abstracting heat all the night through. There is no excuse for the neglect of proper precaution to ensure dry beds. Servants are never to be trusted in this matter, and the managers of hotels, even of the best description, are singularly careless in respect to it.

GENITAL TUBERCULOSIS.

THE interesting subject of genito-urinary tuberculosis was dealt with by Dr. Simmonds at a meeting of the Medical Society of Hamburg (*Deutsche Med. Woch.*, 1886, No. 1). Of 60 cases of tuberculosis of the male generative organs which he had observed, 35 had been examined after death, and amongst these latter the epididymis was affected in 31 cases, the vesiculæ in 29, the prostate in 26, and the testicle in 16—the vesiculæ and prostate being sometimes the starting-point of the disease. In cases of bilateral tuberculosis of the testicle, it is generally believed that the one organ has been infected by the other through the vas deferens and the prostate, but in 2 out of 5 such cases the intra-pelvic organs were entirely free from the disease, which could have been eradicated by a complete castration. As to genito-urinary tuberculosis, it was stated that the origin of the disease was more frequently in the genital than the urinary tract. Of 14 such cases, the kidneys were involved in only 9, the bladder in 13, the vesiculæ in 13, the prostate in 12, and the epididymis in twelve; and clinical evidence was adduced in support of the view that tuberculosis of the urinary bladder is mostly a sequel—even after some years' interval—of tubercular epididymitis. Returning to the cases of genital tuberculosis, it was stated that in 31 out of 35 the lungs were more or less involved, but whether primarily or secondarily could not be determined. There were three cases of acute miliary tuberculosis apparently due to caseous deposits in the genital organs. The majority of the patients were between the ages of twenty-five and fifty; but the list of 60 included two children aged two and seven years respectively, and 12 cases between the ages of fifty and eighty. The duration of the disease was most variable, in some cases lasting for years, in others only a few months. The clinical features were described, and the differential diagnosis detailed. Instances were given of retention of sexual power even in bilateral disease, and in two cases of unilateral disease healthy children were procreated. No evidence of transmission of the disease to the wife was found, and Dr. Simmonds confirmed the opinion that such transmission did not occur. As to etiology, the histories of 26 cases showed inherited tendency in 13; 11 had suffered from gonorrhœa, 4 of which were associated with epididymitis; and in 4 there was a history of traumatism; and it was concluded that traumatism, gonorrhœal or other inflammation, may evoke genital tuberculosis in one who is already the subject of tuberculosis or is hereditarily disposed to it. The prognosis is unfavourable, but castration may be performed where there is no evidence of involvement of the pelvic organs, and only slight changes in the lungs.

NEW LUNATIC ASYLUM NEAR BARCELONA.

ON the 20th of December, with a most imposing ceremony, was commenced a large lunatic asylum in the neighbourhood of Barcelona. This work is being carried on by the administration of the Hospital of Santa Cruz in that city, and its commencement is largely due to the untiring and enthusiastic labours of the celebrated Catalan alienist, Dr. Pi y Molist. From the description of the proposed building, which was read by the secretary to the administration, we learn that it is to be 545 metres in length, the mean breadth being 240 metres, and it is calculated to accommodate from 600 to 700 inmates. There is to be a central portion containing the church and the administrative offices, also two general divisions, one for each sex, besides four special divisions, two for each sex. The grounds are to be enclosed by a fence, which, while quite secure, will afford the patients the opportunity of seeing the surrounding country, thus obviating the depressing effects of enclosure within high walls. The total cost of the building is calculated at £90,000. The site is said to be all that can be desired, and the Barcelonians gratify themselves by the thought that when their asylum is finished it will bear comparison with the best in the world.

RATIO OF INCREASE OF HEIGHT TO INCREASE OF BULK IN THE CHILD.

SOME remarkable observations have been recently made by the Rev. Malling Hansen, principal of the Danish Institution for the Deaf and Dumb, on the progressive increase in height and weight of children, 130 of whom were under his charge. Of these, seventy-two were boys and fifty-eight girls, and they were weighed in batches of twenty, four times daily: in the morning, before dinner, after dinner, and at bed-time. Each child was measured once a day. The weighings and measurements extended over a period of three years, and the results showed that the increase in the bulk and height of the body does not proceed at a uniform rate throughout the year. Three distinct periods, with some minor variations, were observed. In regard to bulk, the maximum period extends from August until December; the period of equipoise lasts from December until about the middle of April, and then follows the minimum period until August. In regard to height, the maximum period corresponds to the minimum period of increase in bulk. In September and October a child grows only a fifth of what it did in June and July. So it appears that during the autumn and the beginning of winter the child accumulates bulk, but the height is stationary. In the early summer, on the other hand, the bulk remains nearly unchanged, but the vital force and nourishment are expended to the benefit of height. When the body works for bulk there is rest for growth, and *vice versâ*. M. Hansen has observed a similar ratio of increase of bulk to increase of height in trees. In regard to the minor variations observed, it is probable that they are dependent—in part, at least—upon the external temperature, so that when this

runs up there is marked increase in weight, whilst a diminution of weight occurs with a fall of temperature. M. Hansen's observations were communicated to the International Medical Conference, held in Copenhagen in 1884, and are undoubtedly of considerable importance. Similar observations have been made both by Dr. Percy Boulton (whose results were given in our columns in 1880) and by Dr. W. R. Miller, surgeon to the West Riding Convict Prison. Dr. Miller experimented on about 4000 prisoners for thirteen years, and obtained results that differ sensibly from those of M. Hansen; for he found that the season of maximum increase in weight in adults is from April to August, and the period of minimum increase in adults from September to March. Dr. Miller found the body became heavier in summer and lighter in winter, and he attributes the loss of weight to the more active excretion of carbonic acid gas in the colder months.

SUPRAPUBIC LITHOTOMY; SUTURE OF THE WOUND.

DR. PILCHER recently showed to the New York Surgical Society a man, twenty-one years of age, from whom he had removed fourteen days previously a vesical calculus weighing 207 grains by the suprapubic method. He departed from the usual mode of treating the case, inasmuch as after removing the stone he closed the wound in the bladder by seven or eight silk sutures passed through the muscular and submucous coats only, and then united the wound in the abdominal wall by a continuous suture in the muscles, and three hare-lip pins with interrupted sutures for the superficial tissues. A catheter was retained in the bladder up to the ninth day. The pins were removed on the tenth day, and the patient returned to his home quite well on the eleventh day. In the discussion that followed the record of this interesting case, the opinion was generally expressed that the case was one eminently suitable for treatment by Bigelow's operation, although Dr. Pilcher's treatment had been very successful. The rapid recovery was no doubt due to the suture of the operation wound and its union by "first intention," instead of by the slower process of granulation. This may probably be safely attempted where the calculus removed is small, as in this case; but where a very large stone is removed and the edges of the wound in the bladder and abdominal wall are more or less bruised, such a step would be fraught with danger from a failure of the "primary adhesion" and extravasation of urine.

THE SANITARY STATE OF MILE-END OLD TOWN.

OWING to the allegations of the Mansion House Council on the Dwellings of the People as to the sanitary state and administration of Mile-end Old Town, an inquiry has been held by Mr. Cubitt Nicholls, who was appointed for the purpose by the Home Secretary. On behalf of the promoters of the inquiry, it was contended that dustbins were defective, yards badly paved or unpaved, yard gulleys untrapped or defective, house sinks also untrapped and yet in direct communication with the sewers, and that dilapidations and other conditions were injurious to health. Special descriptions were given of property in Canal-road, St. Dunstan's-street, and Maplin-street; and a large tenemented block known as Norfolk House, and which was described as consisting of "model dwellings," was shown to be greatly overcrowded, to have only watercloset accommodation at the rate of one for every forty-five persons, and to be so bad in other respects that it could only be improved by extensive alterations. The inspector of nuisances was called, and, in answer to inquiries, he admitted that he was the only official of his class, and this with a population of nearly 120,000 souls. On behalf of the vestry no witnesses were called, the defence being a general one that the authority had taken such action as they legally could do, and that they had not been neglectful of interfering in the interests of cleanliness and health. The contention of the vestry does not, at first sight, seem to be borne out by the facts elicited, but we reserve further comment until the issue of the report, which Mr. Nicholls stated he should make to the Home Office.

THE PROPHYLAXIS OF HYDROPHOBIA.

IT is satisfactory to note that the authorities are, after all, a great deal more in earnest in this matter than appeared likely when we wrote last week. The Commissioner of Police of the Metropolis, as the local authority for the Metropolitan Police District, under the Dogs Act, 1871, 34 and 35 Vict., cap. 56, has issued the following order, dated Jan. 19th:—

"Whereas, mad dogs and dogs suspected of being mad have been recently found in various parts of the metropolitan police district; now I, the undersigned Edmund Yeamans Walcott Henderson, the Commissioner of Police of the Metropolis, pursuant to the Dogs Act, 1871, and in exercise of the powers vested in me as the local authority under the said Act for the metropolitan police district, do hereby order that no dogs not being under the control of any person shall be henceforth for the period of sixty days suffered to be in or upon any thoroughfare or public place, or any place open to the public, within the metropolitan police District. Notice is hereby given that any dog found at large and not under proper control, by being led or otherwise, will be seized by the police in virtue of the above order, and disposed of in accordance with the law. The 3rd section of the Dogs Act, 1871, provides that 'any person who acts in contravention of any order made in pursuance of this section shall be liable to a penalty not exceeding twenty shillings.'"

Colonel Henderson has also issued the following fresh police orders, dated January 18th:—

"Referring to the police order of November 20th last, which expired yesterday, a fresh order in continuation of the same, for a further period of sixty days, has been approved, to commence from to-day. The police order of December 4th, as to muzzling dogs within the metropolis, is to continue to be stringently enforced until further orders."

Sir Richard Cross has also issued a circular from the Home Office stating that it is highly desirable that all local authorities under the Dogs Act of 1871 should rigorously endeavour to stamp out rabies in dogs by following the directions which Professor Brown, the professional officer of the Agricultural Department, has submitted to the Privy Council. The gist of the proposal of Professor Brown is that all dogs should be put under restraint, as they are in the metropolitan police district. The circular has been forwarded to all the courts of general sessions. We sincerely trust that the various local authorities will now do their duty and not be swayed by unnecessarily sentimental feelings. This time the hydrophobia "scare" seems likely to result in an honest and solid endeavour to stamp out the terrible disease, but this most devoutedly-to-be-wished consummation cannot be reached without united and sustained action.

TESTS FOR ATROPINE.

MORE than a year ago Mr. Gerrard showed that the mydriatic alkaloids were possessed of an exceptional power over mercuric chloride. Schweissinger and Flückiger have confirmed these results. The current number of the *Pharmaceutical Journal* contains an article by the last-named chemist, which proves that atropine and hyoscyamine has an alkaline power like the hydrates of sodium and potassium, and thus differs from probably all other alkaloids. Dr. Schweissinger stated that homatropine

was devoid of the power of acting on mercuric chloride. Flückiger, however, has ascertained that it perfectly agrees with atropine, whereas hyoscyamine did not yield a precipitate in the solution of mercuric chloride. As a remarkable result corroborative of Mr. Gerrard's test, Flückiger has discovered that atropine is able to impart a red colouration to phenolphtalein paper. Gerrard showed that atropine was more powerfully alkaline than mercury, and so was able to replace mercury in the chloride. Atropine acts on some colouring matters, such as cyanine, methylorange, and tropœolin in the same way as inorganic alkalies, but it does not blacken calomel (mercurous chloride). Cocaine turns litmus paper blue if moistened with either water or alcohol, but it does not partake of the property of reddening phenolphtalein paper. It precipitates mercuric chloride; but it would be impossible to investigate the composition of the white precipitate, inasmuch as it very soon turns red, as in the case of the mydriatic alkaloids. Mercuric chloride and phenolphtalein are therefore to be considered as very valuable tests for alkaloids.

THE UNIVERSITY OF EDINBURGH.

DURING the past year the total number of matriculated students at the University of Edinburgh has amounted to 3525, being 124 in excess of those enrolled during 1884. Of this total, 1829 were enrolled in the faculty of Medicine, 1104 in the faculty of Arts, 114 in the faculty of Divinity, and 478 in the faculty of Law. Of the students of medicine, 736 (or about 40 per cent.) were from Scotland, 664 (or 36 per cent.) from England, 34 from Ireland, 97 from India, 266 from various British colonies, and 32 from foreign countries. The increasing prosperity of the medical faculty is doubtless to be attributed in part to the recent completion of the admirable new buildings, which are specially fitted up for the use of this faculty, and partly to the rivalry which exists between the professors and the lecturers of the extra-academical schools, whose lectures may be attended during two of the four *anni medici* so as to qualify for graduation. From the Graduation List of 1885 it appears that in the faculty of Medicine fifty-nine candidates obtained the degree of Doctor of Medicine, and 187 the combined degrees of Bachelor of Medicine and Master of Surgery. To a munificent donation of £5000 by Mr. William M'Ewan the University has recently been indebted for the practical completion of the extensive new buildings devoted to medicine. One important want, however, still to be supplied, is that of a hall for graduation ceremonials and other university purposes, for which several subscriptions have been announced.

THE REDWOOD TESTIMONIAL FUND.

AN influential committee has, we are pleased to learn been formed for the purpose of making a public recognition and a permanent record of Dr. Theophilus Redwood's services to pharmacy, and the sciences connected therewith, on the occasion of his retirement from the Professorship of Chemistry and Pharmacy to the Pharmaceutical Society, his appointment as Emeritus Professor, and his attainment (in March next) of the age of eighty years. It is proposed to found a Redwood Scholarship, to be held in connexion with the school of the Pharmaceutical Society, which has been for half a century the scene of Dr. Redwood's labours; and with the surplus, if sufficient, it is the intention of the committee to procure a portrait in oils of the venerable scientist, which will be placed in the house of the Society. One, but by no means the only one, of the claims that Professor Redwood has upon the gratitude and kindly memory of the members of the medical profession is his services in connexion with the British Pharmacopœia. His association with this work began in 1854, when he acted as secretary to the committee which was appointed by the Pharmaceutical Society at the suggestion of the Royal College of Physicians. This committee held its sittings up to 1862, working from the year 1858 in conjunction with the Medical Council. In 1865 Professor Redwood was appointed to edit a new edition, which appeared in 1867, the same office being occupied by him in connexion with the editions which appeared in 1874 and 1885. To recapitulate the full list of the benefits which the Professor has conferred upon the science of medicine, both by actual research and by his pen, is impossible in the space at our command. The columns of this journal, amongst others, have frequently been graced by contributions from his facile pen, and for some years he was one of the most valued contributors to its pages. Personally fully appreciating his labours, we note with special satisfaction that they have not been disregarded nor under-estimated by the most prominent members of the profession he has done so much to advance, for amongst the names of members of the committee who have been appointed to superintend the testimonial fund we notice those of the President of the College of Physicians, the President of the General Medical Council, Sir William Gull, Sir Spencer Wells, Dr. Garrod, and others. We commend the scheme to the attention of our readers, feeling confident that the termination of such a lengthy period of scientific work as that performed by Professor Redwood will not be permitted to occur without a generous acknowledgment.

RUPTURE OF THE LIGAMENTUM PATELLÆ.

DR. SANDS of New York has recorded a case (*New York Med. Jour.*, Dec. 26th) of rupture of the ligamentum patellæ, which came under his care some months after the accident. There was then displacement upwards of the patella for about two inches, and entire loss of extension of the leg. Dr. Sands operated, making a long vertical incision over the patella and its ligament. The ends of the ligament were freshened, and an attempt made to approximate them. This failed until several deep cuts were made in the quadriceps extensor. Two silver-wire sutures were then introduced and cut off short. Drains were placed in the joint, the synovial membrane sutured with catgut, and the superficial wound closed. The wound healed by first intention. The limb was kept stiff for five months, when the splint was discontinued. Two months later the man could go up and down stairs without help, flex the knee to a right angle, and extend it fully and strongly. Dr. Sands finds from statistics of the New York Hospital that this accident is met with only once in twenty-five cases of transverse fracture of the patella. It is caused by indirect violence, and is more common in men than in women. The operation is not recommended for recent cases of this injury.

COLLIERY WOMEN AND GIRLS.

MR. ELLIS LEVER writes to inform us that our remarks on the employment of women and girls in the collieries of Lancashire and other districts have led to some misunderstanding of the subject. The intention in our recent article was to describe the character of the work done rather than the precise point of operations. We must not be taken to mean that women are still employed underground. They do not enter the mine or cut coal, but, with this exception, their work at the pit-mouth in carrying, banking, screening, and loading coal is little, if at all, less irksome than that of the miners proper. It appears to us but right to draw public attention to the manifest injustice of imposing on women and girls a daily toil which, wherever it may be undertaken, can only be described as manly, and for which they are physically and otherwise disqualified.

A PROVIDENT MEDICAL ASSOCIATION FOR LIVERPOOL.

AT a recent public meeting in Liverpool it was resolved that it is desirable that a Provident Medical Association be established for the benefit of the working classes in Liverpool, and that the Manchester system of checking the abuse of medical charities be introduced. The latter clause applies to an understanding between the Association and the hospitals, in virtue of which the latter are to ascertain the fitness of applicants, and refer those who are able and fit to pay to the provident dispensaries. Mr. Reginald Harrison spoke in favour of the motion, and a document was in the hands of the chairman signed by 100 medical men complaining of the abuse of hospitals, and approving the establishment of a well-organised and properly conducted Medical Association. We have referred elsewhere to abuses of the charitable and the provident principle and to the inadequacy of payments to medical men in provident institutions, but the need for them is great everywhere.

PRIMARY UNION OF WOUNDS.

IN the historical parallel between English and French surgery, which Professor Roux published just after his visit to London in 1814, he noted (p. 116) that one of the most distinctive features in the practice of English surgeons was their predilection for the primary union of wounds. So recently as 1881, Professor Verneuil, addressing the surgical section of the London International Medical Congress, on the Primary Union of Wounds (Trans., vol. ii., p. 353), was very much less in favour of it than were his English colleagues. But this international difference is not likely to survive if we are to judge from a passage in Professor Alphonse Guérin's recent work "Du Pansement Ouaté." He lays it down without reservation (p. 379) "that every possible endeavour should be made to secure union by the first intention." It is remarkable that a principle so well established on scientific and practical grounds should only have won its way slowly amongst a people from whom have sprung some of the greatest surgical reformers.

THE HABITUAL DRUNKARDS ACT.

DR. A. PEDDIE of Edinburgh lately read an important paper on this subject to the Society for the Study and Cure of Inebriety, which will shortly appear in the Transactions of that Society. Dr. Peddie speaks on this subject with much authority as a student of dipsomania and one of the earliest advocates of wise and efficient legislation. He describes and demonstrates the utter feebleness of the present Act, which in Scotland, he says, has actually had the effect of reducing both the number of homes for the inebriate and their efficiency. He refutes the absurd plea for personal liberty as applied to men who are no longer masters of themselves, and whose only chance of recovering freedom from a vice that degrades them and ruins their families is in a more effective Act. Such a measure as the Habitual Drunkards Act brings legislation itself into contempt.

EFFECT OF MERCURY ON THE BLOOD.

CONTRARY to the general idea that mercurial treatment diminishes the number of red corpuscles in the blood, M. Galliard finds that they are more frequently increased than diminished, usually undergoing progressive augmentation until the fourteenth day of treatment, after which a slight decrease is observed. The hæmoglobin always increases even when the corpuscles diminish; M. Galliard also finds that the weight of the body increases when undergoing a course of mercurial treatment.

AMERICAN DERMATOLOGICAL ASSOCIATION.

SYSTEMATIC progress in medicine in certain directions can only be accomplished by concerted action, and to fulfil this requirement and enable those similarly interested to cultivate friendships whilst enjoying a few days' holiday, the American Dermatological Association holds an annual meeting at some pleasant spot. Besides the number of excellent papers that have been read from time to time, the standing committees on classification and nomenclature and on statistics have done much real service. At the ninth annual meeting lately held, amongst other papers read, we notice those on Angioma Pigmentosum et Atrophicum, by Dr. White; on Multiple Myomata of the Skin, by Dr. W. A. Hardaway; on a case of Mycosis Fungoïde, by Dr. Tilden; Drs. Hardaway and Heitzman follow up the subject of the Electrolytic Destruction of the Hair Papillæ and of Port-wine Marks; Dr. Hyde discusses the Relations of Lupus to Tuberculosis, and Dr. White the Treatment of Lupus by Parasiticides; Dr. R. W. Taylor relates his valuable experience of Syphilitic Reinfection; and Dr. Duhring, in continuation of his valuable series of communications, seeks to prove the identity of Herpes Gestationis with the Vesicular Variety of Dermatitis Herpetiformis.

THE COLLEGE LECTURES.

AT the Royal College of Physicians this year, the Gulstonian Lectures will be delivered by S. J. Sharkey, M.B., on March 18th, 23rd, and 25th, the subject being "Spasm in Chronic Nerve Disease." The Croonian will follow on March 30th, April 1st and 6th, the lecturer being P. W. Latham, M.D., who will discourse on "Some Points in the Pathology of Rheumatism, Gout, and Diabetes." The concluding series, the Lumleian, will be given on April 8th, 13th, and 15th, by W. H. Stone, M.B., on "Man as an Electric Conductor, Condenser, and Electrolyte." The lectures commence at 5 o'clock on each of the above days.

PATHOLOGICAL SOCIETY.

WE may remind our readers that the meeting of February 2nd has been set apart by the Pathological Society for the exhibition and discussion of specimens of intercranial tumours. The Medical Secretary, Dr. Coupland, will be glad to receive as early as possible the names of intending exhibitors and speakers.

SPHYGMOGRAPHY IN A BALLOON.

ASCENSIONS in balloons are now so frequent that we are in possession of many of the physiological phenomena that attend the sudden alteration of pressure. M. Pozzi has taken some tracings with the sphygmograph at a height of 2150 metres. A rapid rise with brief maintenance and rapid descent, disturbed by well-marked dicrotism, were the chief features of the sphygmogram. The peculiarities are, in relation with the lowering of arterial pressure, due to the sudden rarefaction in passing to the higher strata of the atmosphere. They form the counterpart of the experiments of Viveriot with compressed air.

PURIFICATION OF THE RIVER LEA.

A BILL will be introduced into Parliament this session which provides a remedy for the pollution of the River Lea. It is proposed to construct a sewer from the outfall works of the Tottenham Board to the existing marsh sewer of the Hackney Board, who, with the Metropolitan Board, will be required to receive the effluent of the proposed sewer. It is intended that the work should be done at the cost of the Hackney Board, who should be repaid by the Tottenham

Board; and after the completion of the sewer it is proposed to inflict a penalty on this board if any sewage be allowed to escape into the Lea. It may be anticipated that this scheme will meet with some opposition from the Hackney Board, but it is to be hoped that the latter will not be forgetful that London must grow, as has been the case with the City Corporation in the past.

ISOLATION HOSPITAL AT BOURNEMOUTH.

A NEW infectious hospital erected under the advice of Dr. Nunn and the Town Surveyor has just been opened at Bournemouth. It is excellently designed to meet the several wants of the town for which it has been provided, including as it does accommodation of a private nature for visitors and general wards for the poorer classes. The site is a good and a convenient one, and the hospital is to be placed in telephonic communication with the office of the Commissioners. That body may take credit for having secured to their town the great additional attraction that those who seek renewed health there will not be likely to find themselves exposed to infection by reason of the absence of the means of isolation which every town, and above all every health-resort, should possess.

MORTALITY IN THE MEDICAL PROFESSION.

A PAPER on this subject will be read on Tuesday evening next before the Medical and Chirurgical Society by Dr. William Ogle, Superintendent of the Statistical Department of the Registrar-General's Office. The subject is one of peculiar, and we may say vital, interest to the profession at large, and the previous statistical work of the author is a sufficient guarantee that the subject will be handled in a manner to command implicit confidence.

THE HAMPSTEAD HOSPITAL.

THE vestry of Hampstead have decided to memorialise the Local Government Board not to allow the hospital of the Metropolitan Asylums Board, which is situated in their district, to be again used for the reception of cases of small-pox. The arguments used in support of the memorial are based upon the reports of Mr. W. H. Power as to the influence of the Fulham Hospital, and on that of Dr. Gwynn, medical officer of health, as to the influence of the Hampstead Hospital.

THE Mayor of Marseilles, in consequence of the small-pox epidemic in that city which we announced last week, has ordered a new hospital for patients suffering from that disease to be opened at the Pharo, whither 120 convalescents, now at the Hospital of La Conception, will be removed. It is stated that the epidemic originated at Toulon, the sanitary condition of which still remains in a most unsatisfactory state.

THE Corporation of Manchester are about to enter upon the execution of the great water-supply scheme which has occupied so much public attention during the past three or four years, a scheme which is perhaps the largest undertaking of the kind in which any municipal body in this country has hitherto embarked. The length of the conduit will, when completed, be almost 100 miles, the source of the supply being the Lake of Thirlmere in Cumberland. Contracts for above 50,000 tons of pipes, involving an outlay of about £230,000, have already been entered into.

DR. J. HUGHLINGS JACKSON has been recently elected Corresponding Member of the Royal Academy of Medicine of Belgium.

WE regret to have to report yet another victim to diphtheria caught in the execution of his professional duty, in the person of Mr. George Searancke, surgeon, of Ashley-road, Bristol. He was attended by his personal friend, Dr. Simpson, and was seen in consultation by Dr. Barrett-Roué, of Clifton, Mr. W. H. Harsant, and Mr. Greig Smith; but, in spite of every effort made on his behalf, grave symptoms of cardiac failure set in, and he died of asthenia on the sixth day of his illness.

WE have received the first number of the "University College (Liverpool) Magazine," which is to appear quarterly. It makes a good start with several articles of considerable interest and literary merit, including one by a medical contributor—viz., Mr. A. Barron, M.B., upon Micro-organisms Mr. Barron treats his subject in a commendably lucid manner, and his paper is illustrated by a well-executed coloured plate. We wish the new venture all success.

AN International Congress of Hydrology and Climatology is being arranged. It is to commence on October 1st, 1886, and is to be held at Biarritz, under the presidency of Dr. Durand Fardel. The Municipalities of Arcachon, Devax, Bayonne, Cambo, and many other places, have sent representatives to assist in the preliminary arrangements. It is expected that numerous medical and scientific men will take part in the Congress.

ON the 18th inst., Surgeon-General McNab died very suddenly at his residence at Preston, from an affection of the heart. The deceased, who was widely known and respected, was a justice of the peace for the county of Lancaster.

THE four children who were bitten by a rabid dog in Newark, New Jersey, and were sent to Paris to be submitted to inoculation by Prof. Pasteur, are reported to have arrived in New York in good health.

A NEW medical, journal entitled *La Medicina Castellana*, has just been commenced. It is published at Valladolid, and is edited by Dr. Don A. de Redondo, professor in the medical faculty of that city.

A PERSON at Natal is bringing an action for £1000 against a medical man for alleged malicious arrest and incarceration on the ground of insanity. This case is the first of its kind which has occuurrd in the colony.

THE Hygienic Congress, which was intended to be held this year at Vienna, has, we learn, been postponed till 1887.

THE MONT DORE, BOURNEMOUTH.

THERE seems to be no doubt that the three weeks' "cure" at Mont Dore, Auvergne, is beneficial in many cases of chronic catarrh of the respiratory passages, in some of asthma, rheumatic gout, and chronic skin diseases. The mode of action of the Auvergne Mont Dore is not a subject on which entire agreement of opinion exists. Most French physicians, and at all events those who practise at the French station, maintain that in suitable cases the waters are the principal agents in the attainment of the frequent excellent results. Sceptical English physicians are disposed to think that even a three weeks' residence in the mountain air of Auvergne may not be altogether harmful in itself, and may be a very powerful cause in the production of the good results. Which of these two positions is the correct one it

is difficult to say. One of the oldest, and certainly one of the best, practitioners at the Auvergne station, Dr. Emile Emond, Chevalier de la Légion d'Honneur, having devoted a large portion of the last twenty years of his life to the Mont Dore, is a strong believer in the efficiency of its mineral waters, and is of opinion that a mere stay of twenty-one days is inadequate to account for the marvellous improvements which it is certain that he and many others have witnessed.

The Mont Dore, Bournemouth, is an establishment designed as a sanatorium with the object of carrying out as far as possible the treatment pursued at the French station. It is perhaps needless to say that there is a difference between the Bournemouth imitation and its prototype. It could not be otherwise. But the presence of Dr. Emond during the winter months will guarantee that the method of treatment is the same as at Auvergne. The Bournemouth sanatorium is situate almost in the centre of the town on the east side of the long narrow strip of pleasure-grounds, and consequently is in uninterrupted communication with the sea air, enjoys perfect shelter from cold winds, and possesses every climatic advantage that the situation affords. At this inclement season of the year, the contrast between London and Bournemouth is as striking as it is grateful. The Mont Dore has been erected with great care, and every attention appears to have been paid to the sanitary arrangements: lighting, warming, and ventilation—at all events so far as the residential portion of the building is concerned. The baths and hydro-therapeutical apparatus, too, are now almost completed, and in their final construction have had the benefit of the advice and supervision of Dr. Emile Emond. The principal communication between the baths and the hotel is by means of a landing and flight of stairs covered in by glass sides and roof; arrangements are being made, we understand, for the more efficient warming of this corridor. At the foot of the stairs—i.e., on the basement of the building—one faces three doors: the one on the right hand leads to a most luxurious and exceedingly well ventilated Turkish bath, the central one is the ladies' entrance to the Mont Dore system, and the third door is the gentlemen's entrance. The fourth side of this compartment contains a buffet, at which the Mont Dore waters may be drunk. The male and female sections are exactly alike. There is first a dressing-room similar to what is customary in Turkish baths; the atmosphere of this chamber, and indeed of the whole of the baths, is kept at a uniform temperature of about 68° F. The long corridor leading from the dressing-room is lined on one side by a series of small cubicals, in each of which there is a bath provided with hot and cold water, salt water, and a douche fitted with a rose or a nozzle; arrangements also exist for galvanic baths. On the opposite side of the corridor is a series of four rooms. In the first there is a vaporarium constructed of wood and shaped like some dustbins, with an aperture in the roof through which the head of the bather, who sits inside, projects; the vaporarium is filled with hot steam—prepared from the Mont Dore waters. In this room there are also powerful douches both of water and steam. The second chamber contains in its centre a kind of cauldron, which when in action emits steam from several spray points; this is filled with the imported waters of Mont Dore. At each corner of this apartment a rose projects, and when the system is in action the whole room is speedily filled with vapour. Here the patient inhales the steam and is at the same time enveloped in vapour. In the third apartment is a series of sprays worked by steam, and feebly charged with Mont Dore water by means of an aspirating tube that acts in the same fashion as Lister's spray. The next room is fitted with all the necessary apparatus for irrigating the nose, throat, eyes, and external ears. In addition, there is another bath-room in which water is kept at a uniform temperature of 45° C., and also a compartment where garglings may be carried out. The architecture is therefore complete. The patients drink and use in inhalations water imported from Mont Dore. But whenever large quantities of fluid have to be employed, as in baths, ordinary water is used prepared by Messrs. Allen and Hanburys so as to be chemically identical with the genuine natural water of Mont Dore. Dr. Emile Emond believes that the beneficial effects are largely due to the mode of administration of the baths, douches, inhalations, aspirations, and irrigations.

At the present time there are under treatment cases of chronic bronchitis, phthisis, asthma, eczema, chronic pharyngitis, and clergyman's sore-throat. The treatment has only been imperfectly in operation for three months, and it is difficult to speak at present positively, but Dr. Emond thinks the results that have hitherto been obtained at Bournemouth are most encouraging. It speaks well for the future good management of the place that the directors have thought it advisable to appoint a resident physician to look after the comforts and necessaries of the patients who reside at the Mont Dore; and Dr. E. P. Philpots, who is well known as the proprietor of a successful sanatorium—Bourne Hall, at Bournemouth itself—has recently been appointed manager of the new institution. Under present arrangements Dr. Emile Emond will reside at the Mont Dore every winter. The system of baths and inhalations and the like is under his sole supervision.

SPONTANEOUS BLENNORRHAGIC CONJUNCTIVITIS.

PROFESSOR FOURNIER, the well-known dermatologist of Saint Louis, recently called attention in a clinical lecture to an interesting form of conjunctivitis arising in connexion with gonorrhœa, but which is quite different in its origin from the ordinary purulent conjunctivitis produced by the contact of gonorrhœal pus with the conjunctiva. By the observation of a patient suffering in this way he was able to astonish the beholders by telling him that he was suffering from a urethral discharge, without taking the clothes off the bed or even examining the genital organs; but when this was done, it was found that such was the case, and that the patient had a veritable urethritis, of which, through ignorance or neglect, he was himself unconscious.

The eye becomes affected during gonorrhœa in two ways. There is first the ordinary purulent conjunctivitis, which is invariably produced by the inoculation or transference of purulent matter from the genital organs by direct contact; and there are other affections of the eye which arise during an attack of gonorrhœa, but which are not produced in this way, but rather by some internal cause in the same way as an arthritis or sciatica. This is the true disease of the eye associated with blennorrhagia. The other is an accident, and moreover it is far more common; for every purulent ophthalmia there are fifty of this nature. It is not always of the same type; sometimes it is an aquo-capsulitis, sometimes an iritis, and sometimes a conjunctivitis. In the latter case the eye looks red and vascular, but there is seen on close examination a sort of œdematous infiltration, which when well marked forms a kind of pad round the corneal margin. Unlike most inflammations of the conjunctiva, it produces hardly any subjective symptoms. There is hardly any pain, no photophobia, and only a slight sensation of itching, and, as a rule, patients continue at their work without any inconvenience, and if they do consult a doctor for their urethritis they say nothing about their eyes. This remarkable absence of pain or inconvenience in the eyes permits the patients to make full use of them, and a man looks about him without any shutting of the lids or much watering of the eyes, and it was this fact which brought the Professor to make the diagnosis of blennorrhagia; it is a striking fact, in which the objective phenomena bear no relation to the subjective, and therefore quickly excite the attention of observers.

As regards the course and duration of the disease, it commences insidiously and increases in intensity for several days, till it reaches a certain stage, when it remains inactive, and no further changes take place till resolution commences, which sometimes is effected very quickly. The average duration varies between ten and twenty days. It often presents a curious shifting character, which reminds one of the phenomena of rheumatism: for example, it may begin in one eye, which after a time is cured; then it appears in the other, and perhaps goes back again to the eye first affected. Another interesting fact about it is its obvious connexion with rheumatism of a gonorrheal origin. Not all cases of gonorrheal rheumatism present the disease of the eye, but in many cases of that affection the eye phenomena have a tendency to recur two, three, or more times, as was the case in the patient the subject of the lecture who during the

four months of his rheumatism had had numerous attacks in the eyes. As regards the seat of the lesion, it may be very localised, either to the mucous membrane of one lid or to a portion of the ocular conjunctiva.

It may be urged that this is only a very mild form of the well-known purulent conjunctivitis, but a consideration of their evolution and anatomical characters shows that there is in reality no relation between them. The purulent conjunctivitis affects only one eye as a rule, while the form under consideration more often affects the two eyes; the former retains its hold on one eye, while the latter is migratory, and shifts from one to the other. Second attacks of purulent conjunctivitis are rare, because the patient has learnt the dangers of the gonorrhœal pus, but the rheumatic variety will often return with each successive urethritis. Finally, the terminations of the two diseases are totally different,—the one requires most energetic treatment to save the eye, while the other does best when left alone or with mild applications.

As to treatment, the Professor advises the protection of the eye with smoked glasses, which is all that is necessary in mild cases; but when the disease is more pronounced, it may be necessary to keep the patient indoors, to interdict all reading and stimulating drinks, and to give eye douches of tepid water; or, if there is any indication that the iris may become infected, he uses atropine drops.

THE UNIVERSITY OF LONDON.

THE meeting of Convocation on the 19th inst. was a prolonged one; but the House was counted out before all the notices of motion on the agenda paper had been exhausted. Considerable time was spent in considering a report from the Annual Committee recommending changes in the matriculation examination. The amended syllabus drawn up in the report contains alterations in the details of the subject of languages, the omission of modern geography (!), the substitution of mechanics for natural philosophy, and in place of chemistry one of the following branches of experimental science at the option of the candidate—viz., 1, chemistry; 2, heat and light; 3, magnetism and electricity. Some difference of opinion existed as to whether the severity of the examination would be increased or diminished by these changes; and amendments were moved to introduce other optional subjects, such as physiography, drawing, and the science of music, and to diminish the number of obligatory languages. Eventually the motion to adopt the revised syllabus as presented in the report was carried. Another motion to extend the list of questions on the paper, so as to allow the candidate for matriculation a choice, was proposed by Dr. Weymouth, seconded by Mr. Spratling, and carried. A resolution to adopt a motto in connexion with the University arms was proposed by Mr. Bentwitch, seconded by Mr. Cross, and carried, the subject being referred to the Annual Committee. The next question discussed was one affecting the legal and medical faculties. It was a proposal to extend the principle of examination through an "original printed thesis," recently applied to the D.Lit. and D.Sc. Examinations, to the Doctorate of Laws and Medicine. There was considerable opposition to the motion, Mr. Howse and Dr. F. Taylor condemning it, but the debate was chiefly confined to the graduates in laws. The motion was lost. The consideration of changes in the LL.B. Examination was referred to the Annual Committee, and the sitting was suspended.

BRITISH MEDICAL BENEVOLENT FUND.

THE annual general meeting of subscribers to the British Medical Benevolent Fund was held on Thursday, Jan. 14th, at 31, Lower Seymour-street, the house of the Honorary Financial Secretary, Mr. Field, at 4 P.M., when Mr. J. F. France, J.P., Vice-President of the Fund, took the chair in the unavoidable absence of the President, Sir Geo. Burrows. The financial statement was submitted, and the annual report of the committee for the past year was read by the Treasurer, from which it appeared that the donations during 1885 had amounted to £808, and the subscriptions to £1229; a total of £2037: an increase in the amount of donations, while the subscriptions had not fallen off much, inasmuch as the total received showed a slight increase upon that of last year. The disbursements during the year had been, in grants, £1894; in annuities, £1086; in all £2980; and the entire expense of collecting and distributing this large sum (over £5000) had been £141, or about 3 per cent.; including stationery, collector's commission, the printing and postage of the report (a copy being sent to each subscriber), the postage and other expenses of the honorary secretaries for finance and cases, and the postage and expenses connected with the distribution of nearly £3000 in weekly or monthly instalments (a peculiar characteristic of this fund), carried out in an admirable manner by the Cheque Banks. The number of cases relieved was 161; but many of those which came before the committee were exceptionally hard, and the committee felt that, had the means at their disposal been larger, they would have been better able to cope with the painful amount of misery, want, and even actual starvation revealed when the touchstone of personal inquiry came to be applied. This year, 1886, is the jubilee year of the fund, and it is intended to make a special effort to render the year memorable in the annals of the fund by holding at an early date a dinner, at which Sir James Paget has kindly consented to preside, by means of a special appeal to every registered medical man, and by an effort at the meeting of the British Medical Association at Brighton in August, to collect the honorary local secretaries together in a meeting, and try to induce prominent medical men in districts and towns not now represented upon our list to take an interest in the work, accept the post of local secretary, and so aid the committee in the work of helping those who are known to be trying to help themselves, and rescuing those who, but for the help of the fund, would have sunk in the struggle. In the annuity department there were three deaths, and seven fresh annuitants were elected, making a total of fifty-seven. There are, however, still forty-four eligible candidates waiting for a chance of election, all over sixty years of age, not one enjoying an income of £10, and most of them past work and practically penniless, and the committee would most strongly urge their claims upon the profession. Mr. S. H. Byam joined the committee in the place of Mr. Thomas Smith (resigned); and Dr. Habershon was elected a vice-president in the room of Mr. W. B. Page, whose death the fund has good reason to deplore.

VITAL STATISTICS.

HEALTH OF ENGLISH TOWNS.

IN twenty-eight of the largest English towns 6133 births and 4149 deaths were registered during the week ending January 16th. The annual death-rate in these towns, which had been equal to 25·5 and 22·5 per 1000 in the preceding two weeks, rose again last week to 23·8. During the thirteen weeks of last quarter the death-rate in these towns averaged only 20·0 per 1000, and was 2·6 below the mean rate in the corresponding periods of the nine years 1876-84. The lowest rates in these towns last week were 17·2 in Hull and Sunderland, 18·6 in Sheffield, and 19·1 in Birkenhead. The rates in the other towns ranged upwards to 30·6 in Manchester, 31·3 in Plymouth, 31·8 in Portsmouth, and 32·7 in Halifax. The deaths referred to the principal zymotic diseases in the twenty-eight towns, which had been 495 and 448 in the previous two weeks, declined last week to 435; they included 156 from whooping-cough, 111 from measles, 46 from scarlet fever, 41 from "fever" (principally enteric), 39 from diphtheria, 37 from diarrhœa, and 5 from small-pox. No death from any of these zymotic diseases was recorded last week in Derby, whereas they caused the highest death-rates in Oldham, Nottingham, and Plymouth. The greatest mortality from whooping-cough occurred in London, Portsmouth, and Brighton; from measles in Nottingham and Plymouth; from scarlet fever in Norwich, Leicester, and Birkenhead; and from "fever" in Norwich. The 39 deaths from diphtheria included 22 in London, 5 in Liverpool, 3 in Bristol, 2 in Portsmouth, and 2 in Leeds. Small-pox caused 6 deaths among the residents of London and its outer ring, 2 in Liverpool, 1 in Manchester, and 1 in Cardiff. The number of small-pox patients in the metropolitan asylum hos-

pitals situated in and around London, which had declined in the preceding nine weeks from 90 to 35, were again 35 on Saturday last; 11 patients were admitted to these hospitals last week, against but 2 and 1 in the preceding two weeks. The Highgate Small-pox Hospital contained 5 patients on Saturday last, no case having been admitted during the week. The deaths referred to diseases of the respiratory organs in London, which had been 384, 610, and 518 in the preceding three weeks, were 534 last week, and exceeded the corrected weekly average by 45. The causes of 90, or 2·2 per cent., of the deaths in the twenty-eight towns last week were not certified either by a registered medical practitioner or by a coroner. All the causes of death were duly certified in Leicester, Portsmouth, and in three other smaller towns. The largest proportions of uncertified deaths were registered in Salford, Oldham, Halifax, and Hull.

HEALTH OF SCOTCH TOWNS.

The annual rate of mortality in the eight Scotch towns, which had been 21·6 and 22·9 per 1000 in the preceding two weeks, further rose to 23·9 in the week ending Jan. 16th, and was 0·1 above the mean rate during the same week in the twenty-eight English towns. The rates in the Scotch towns last week ranged from 18·1 and 19·7 in Greenock and Perth, to 26·0 in Paisley and 26·5 in Glasgow. The 589 deaths in the eight towns showed a further increase of 24 upon the numbers in the previous two weeks, and included 12 which were referred to diarrhœa, 9 to whooping-cough, 8 to diphtheria, 6 to "fever" (typhus, enteric, or simple), 5 to scarlet fever, 2 to measles, and 2 to small-pox; in all, 40 deaths resulted from these principal zymotic diseases, against 32 and 45 in the preceding two weeks. These 40 deaths were equal to an annual rate of 1·8 per 1000, which was 0·7 below the mean rate from the same diseases in the twenty-eight English towns. The 12 deaths attributed to diarrhœa exceeded the numbers in recent weeks, but were slightly below the number in the corresponding week of last year. The fatal cases of whooping-cough, which had increased from 7 to 15 in the preceding four weeks, declined again to 9 last week, and included 7 in Glasgow. The 8 deaths from diphtheria showed an increase upon recent weekly numbers, and also included 7 in Glasgow. The deaths referred to "fever," which had been 2, 8, and 5, in the previous three weeks, were 6 last week, of which 3 occurred in Glasgow. Four of the 5 fatal cases of scarlet fever were also returned in Glasgow. Both the deaths classed as small-pox were attributed to chicken-pox. One occurred in Glasgow and 1 in Aberdeen. The deaths referred to acute diseases of the respiratory organs in the eight towns, which had declined in the preceding five weeks, from 178 to 132, rose again last week to 145, but were 54 below the number returned in the corresponding week of last year. The causes of 82, or nearly 14 per cent., of the deaths in the eight Scotch towns last week were not certified.

HEALTH OF DUBLIN.

The rate of mortality in Dublin, which had been equal to 37·1 and 28·8 per 1000 in the preceding two weeks, rose again to 33·3 in the week ending January 16th. During the thirteen weeks of last quarter the death-rate in the city averaged 27·0 per 1000; the mean rate during the same period did not exceed 19·5 in London and 19·0 in Edinburgh. The 225 deaths in Dublin last week showed an increase of 30 upon the number returned in the previous week, and included 30 which were referred to the principal zymotic diseases, against 32 and 15 in the preceding two weeks; 19 resulted from whooping-cough, 4 from scarlet fever, 4 from "fever" (typhus, enteric, or simple), 3 from diarrhœa, and not one either from small-pox, measles, or diphtheria. These 30 deaths were equal to an annual rate of 4·4 per 1000, the rate from the same diseases last week being 2·7 in London and 0·6 in Edinburgh. The fatal cases of whooping-cough, which had been 10, 17, and 8 in the previous three weeks, rose last week to 19, and exceeded the number in any week of last year. The deaths referred to scarlet fever and to "fever" also showed an increase upon the numbers in the previous week. Eight inquest cases and 11 deaths from violence were registered; and 74, or nearly a third, of the deaths were recorded in public institutions. The deaths of infants showed an increase, whereas those of elderly persons corresponded with the number in the previous week. The causes of 22, or nearly 10 per cent., of the deaths registered during the week were not certified.

THE SERVICES.

ADMIRALTY.—The following appointments have been made: Staff Surgeon H. J. Madders, M.D., to the *Hyacinth*; Staff Surgeon Michael Fitzgerald, to the *Caroline*; Surgeon Nicholas C. Ross, to the *Penguin*; Surgeon Thomas Nunan, M.D., to the *Cambridge*.

ROYAL NAVAL ARTILLERY VOLUNTEERS.—London Brigade: John Arkle Waring to be Surgeon.

ARTILLERY VOLUNTEERS.—1st Inverness-shire: James Milne Chapman, Gent., M.B., to be Acting Surgeon.

RIFLE VOLUNTEERS.—16th Middlesex (London Irish): Surgeon Arthur Cæsar resigns his commission.

Correspondence.

"Audi alteram partem."

MR. HORSLEY'S CRITICISM ON PROF. SCHIFF.

To the Editor of THE LANCET.

SIR,—A student was once asked, "What would be the result of tying the carotid artery"? He replied, "The pneumogastric nerve is in such close relation with the carotid artery that in tying the artery the operator would inevitably tie the nerve with it, and the result would be death." The Brown Professor's criticism on Professor Schiff's experiments on the posterior columns of the cord is of like nature: "Schiff has taught that the posterior columns of the spinal cord are conductors of tactile sensation direct to the excitable area of the cortex; but Mr. Horsley shows that the results obtained by Schiff are to be explained by the injury that is unavoidably done to the motor tracts in the spinal cord." (THE LANCET, Jan. 2nd.)

In the case of the ligature of the carotid artery above mentioned, if the student whose answer is recorded were himself the operator, his prediction would in all probability be verified to the letter in spite of the lack of natural sequence between ligature of the carotid artery, ligature of the pneumogastric, and death. The section of the posterior columns without injuring the neighbouring portions of the cord unquestionably requires higher skill than is necessary to avoid including the pneumogastric in ligature of the carotid; and it is not improbable that many an operator may have found that he has cut structures he did not mean to touch. From the lack of success of one operator, however, the lack of success of other operators cannot safely be inferred. Those who have witnessed Professor Schiff operate, and have afterwards seen at the post-mortem and microscopical examinations the wonderful accuracy with which the parts cut or removed corresponded with the intention of the operator, will be slow to charge him with the source of fallacy put upon him by the Brown Professor.

I am, Sir, your obedient servant,

WILLIAM R. HUGGARD.

École de Médecine, Genève, Jan. 12th, 1886.

GASTROTOMY NOT GASTROSTOMY.

To the Editor of THE LANCET.

SIR,—Mr. Knowsley Thornton, in recording a case in which he removed a mass of hair from the stomach through an incision into the viscus, has applied the term "gastrostomy" to the operation. This use of the term is liable to produce considerable confusion, and to lead to errors in the subsequent tabulation of cases. The word gastrostomy is derived from two Greek words, γαστηρ and στομα; and it signifies an operation by which a "mouth" is made into the stomach, or a permanent gastric fistula is established. It is the operation that has been largely practised for œsophageal obstruction. Gastrotomy, on the other hand, is

derived from γαστηρ and τομη, and denotes an incision made into the stomach. The conditions demanding, and the mode of performing, these operations are quite distinct. It is therefore very important that they should be kept quite distinct, and no confusion between them allowed to creep into medical literature by a wrong use of the terms applied to them.

In Mr. Thornton's paper, and also in his letter, he referred to Schönborn's case of gastrotomy for a ball of hair in the stomach, which, like his own, was successful. He might, however, have considerably enlarged his list of gastrotomies for the removal of foreign bodies from the stomach. For it matters not whether the offending substance be a knife, a fork, a spoon, a bar of lead, or a ball of hair—the essential reason for the operation, its mode of performance, and its dangers, are the same; and Mr. Thornton's argument is materially strengthened by the great success that has attended this operation, whatever the cause for which it has been undertaken. In the "Medical and Surgical History of the War of the Rebellion," Dr. Otis gives full references to many of the cases, but the most complete list of cases is furnished by Dr. Ashhurst in a note to Mr. Henry Morris's article on Injuries and Diseases of the Abdomen in the fifth volume of the "International Encyclopœdia of Surgery." In this table are placed thirteen undoubted cases of gastrotomy for the removal of foreign bodies from the stomach, and ten of the patients recovered, while an eleventh case ended fatally, owing to an indiscretion in diet on the part of the patient. There are five other cases which are more or less doubtful in their character, but in regard to two of them the evidence in their favour is certainly very strong; all these cases are said to have terminated in recovery. This operation is by no means a modern triumph. The earliest recorded case occurred about 1602, and the second in 1635, both of them being successful. The foreign bodies removed have most often been knives, forks, and spoons, but the nature of the body to be removed in no way influences the steps of the operation.

I am, Sir, yours faithfully,

January, 1886. CHIRURGUS.

"VISITORS TO SMALL-POX HOSPITALS."

To the Editor of THE LANCET.

SIR,—The attainment of the ideally commendable is evidently easier and more rapid in the bracing atmosphere of the north than under the more relaxing conditions of southern latitudes. We lesser lights, *en bas*, are not clothed with the autocratic power expressed in Dr. Russell's phrase "without saying anything to anybody." We are governed by committees who require a great deal of persuasion to effect administrative reforms. As regards vaccination of visitors to the Western Hospital, the sending of a circular to intending visitors of patients, advising them to get revaccinated before entering the hospital, was for many years considered sufficient and to cover all responsibility, and this in spite of my oft-repeated recommendation of the surer method; and it was only the occurrence of attacks amongst unprotected visitors in 1884 that afforded me a powerful text for the suggestion that their revaccination should be seen to at the Hospital. It will interest Dr. Russell and your readers to know that after the presentation of my report the Committee of the Western Hospital authorised my colleague (Mr. Gale), during my absence, to offer to revaccinate all visitors to dangerously ill patients. This has been freely carried out, and no attacks amongst visitors have since come under notice.

I am, Sir, yours truly,

London, Jan. 18th, 1886. R. D. R. SWEETING.

THE TREATMENT OF PERTUSSIS.

To the Editor of THE LANCET.

SIR,—Perhaps it would interest Messrs. Cory and Harries, whose communications appeared in your last issues, as well as some of your readers, to know that I have seen during the greater part of last year, under the care of the distinguished Professor Monti, at the Vienna Poliklinik, many cases of whooping-cough treated by the use of antiseptics. The results show that antiseptics, if they have not a decided specific action, have at least a powerful influence in limiting the duration of the attack and soothing the sufferings of the little patients.

Professor Monti's system of treatment was as follows:—Inhalations—through a modified Seigler's vaporising apparatus—of carbolic acid (1 per cent. solution) or benzoate of sodium (5 per cent.) four times during the day. Internally, he administered one or other of the following powders in milk every two hours, the dosage being proportioned to the age of the child—viz., muriate or tannate of quinia, benzoate of soda, and white sugar. He found the tannate the most agreeable salt of quinia to administer to children. The duration of the cases treated as above averaged twenty-one days; no doubt some extended longer, but they could always be accounted for by the development of complications. I may also add that in no case treated with carbolic acid were symptoms of poisoning found.

I am, Sir, yours truly,

Dublin, Jan. 19th, 1886. ALFRED J. SMITH, M.B., M.Ch.

ELECTRIC ILLUMINATION IN OPERATIONS UPON THE PALATE.

To the Editor of THE LANCET.

SIR,—On Thursday last, having promised to perform an operation for the closure of a cleft palate, I found myself embarrassed by a failing light. Unwilling to postpone the operation, I gladly availed myself of the suggestion of Mr. Weiss, who was present, to use the electric lamp which he had been demonstrating to the students. Accordingly, having removed the mirror from one of Semon and Vesey's apparatus for illuminating the larynx, and which is supplied by four Leclanché cells, Mr. Weiss held the lamp just inside the mouth, and, by the beautiful, steady, and distinct light thus afforded, I was able to see clearly, better than even by the brightest daylight, and the operation was quickly and satisfactorily concluded. To those who, like myself, have had to postpone such operations, to the distress of the patient and at personal inconvenience, I feel sure that this new adjuvant will prove the greatest boon. The smallness of the apparatus makes it free from any inconvenience, and the almost entire absence of heat renders it void of danger, while the clear brightness of a steady light renders every step in this delicate operation more facile even to practised hands.

I am, yours faithfully,

Grosvenor-street, Jan. 1886. JOHN H. MORGAN.

I'S AND Y'S.

To the Editor of THE LANCET.

SIR,—Mr. Tweedy has very properly and learnedly called attention to the etymology and right spelling of the word "hypopyon," which in a recent issue of THE LANCET is spelt with an *i*, "hypopion." May I point out how frequently and how erroneously the word "phimosis" is spelt with a *y*? In an important surgical work which has been published within the last few weeks, the word "phymosis" occurs over and over again. Now "phimosis," the proper spelling, is derived from the very appropriate word φιμός, a muzzle—is, in fact, the very word φίμωσις; "phymosis" could only come from some such word as φῦμα, a growth, or from θύμος, fumus, smoke, when it should be spelt "thymosis," and would be without meaning. It is incumbent on a learned profession to be careful of its *i*'s and *y*'s, as well as of its *p*'s and *q*'s. I am, Sir, yours faithfully,

Jan. 13th, 1886. Y. P. Q.

EDINBURGH.

(From our own Correspondent.)

EDINBURGH ROYAL INFIRMARY.

THE Annual Meeting of the contributors to the Royal Infirmary was held on Monday last. The report of a committee appointed to represent the contributors in reviewing the management of the institution during the last twelve months was read and adopted by the meeting. The report spoke highly of the general management during the last

twelve months, and detailed some interesting particulars of the work accomplished during that period. 25,000 out-patients and nearly 8000 in-patients had received the benefits of the institution during the year, the former number corresponding to the number of out-patients in the preceding year, the latter showing an increase of over 200 in-door cases as compared with the same period. The gross expenditure for the year was £33,474. With regard to subscriptions, it was announced that there had been a slight falling off in the amount of the Hospital Sunday Fund; but some handsome donations had been received, one of the most recent being a sum of £5000 from Mr. R. Mackay Smith. A scheme was suggested by which domestic servants might contribute small sums towards the maintenance of the Institution. During the past year the hospital accommodation has been expanded to its full extent. This represents 600 beds, and exhausts all the space which the present buildings place at the managers' command. Two wards must of necessity be kept empty to allow of the transference, whether of medical or surgical patients, to a temporary resting-place when any of the wards have to undergo temporary repair or cleansing, and most of the wards are thus temporarily vacated annually, or at least biennially—a system which contributes greatly to the brightness and freshness, as well as to the wholesomeness, of the hospital buildings.

LECTURES ON CLIMATOLOGY.

Dr. R. W. Felkin, F.R.S.E., commenced this week a series of lectures at the Minto House School of Medicine on the Diseases of the Tropics and Climatology. The course is specially intended for the benefit of students whose duties as medical men are likely to lead them to tropical climes. Dr. Felkin has had unusual opportunities of studying disease in these regions, as he has travelled widely in Africa and in the far East, and has combined the practice of medicine and surgery with the extensive geographical and ethnological investigations which have won him recognition in the scientific world. In his introductory lecture delivered last Tuesday he treated specially the subjects of acclimatisation and malaria. The latter he described as the typical disease, a thorough grasp of which was the key to understanding a great number of the special diseases by which tropical life is rendered so dangerous to Europeans and to natives alike. In a school where so many colonial students congregate, and whence so many practitioners are supplied to the colonies, a course of lectures such as this is an inestimable boon; and in Dr. Felkin the Edinburgh School has secured the services of a thorough expert, who, in addition to his large personal experience of his subject, evinces considerable aptitude as a lecturer and demonstrator.

THE ROYAL SOCIETY OF EDINBURGH.

At the meeting of this Society held last Monday, an obituary notice of the late Professor Archer, Director of the Edinburgh Museum of Science and Art, was read by Dr. J. D. Marwick. The deceased gentleman was widely known in scientific circles as a most successful collector of objects illustrating science and the arts; and his energy may be said to have created the present prosperous and popular museum with which this city is provided. He acted as commissioner of the British Government at several international exhibitions, and at some he occupied the post of one of the judges. Dr. Marwick paid the highest tribute to his personal and social qualities, which were such as to obtain for him everywhere the highest esteem. Several papers followed, chiefly upon technical subjects. There was a large attendance of Fellows, and amongst the visitors present was the Right Hon. Mr. Childers, who is at present conducting an election campaign in Edinburgh, and who was introduced to the Society's hall by Dr. Russell, F.R.S.E., the chairman of his committee.

MR. BROWNING AND THE EDINBURGH STUDENTS.

Mr. Robert Browning has accepted the Presidency of the Associated Societies of the University of Edinburgh. In answering the requisition sent him, Mr. Browning said that he could only give one response to those who had so enthusiastically greeted his appearance at the recent Tercentenary Festival. That reception had created a relationship between himself and them, which he would be highly gratified to perpetuate by accepting the proffered post of honour.

Edinburgh, Jan. 20th.

GLASGOW.

(From our own Correspondent)

THE FACULTY LIBRARY.

For a good many years those using the splendid library of the Faculty of Physicians and Surgeons have felt the want of a full and recent catalogue of the works contained in the library, though the encyclopædic knowledge of medical literature possessed by Mr. Duncan, the librarian, caused this want to be less pressingly felt than it otherwise would have been. Two or three years ago the work of preparing such a catalogue, including lists under the headings of authors' names and subjects, was begun; this work has been steadily carried on, chiefly by Mr. Duncan, and is now completed, the catalogue being ready for issue in the form of a large quarto volume.

GLASGOW HOSPITALS.

Glasgow has had one more added to its hospitals in the shape of a modest undertaking started under the name of "The Glasgow Samaritan Hospital for Women." This hospital, containing three beds and provision for dispensary work, was opened on January 4th. In his opening speech Mr. J. Stuart Nairne, who is surgeon to the hospital, and to whose efforts its establishment is due, claimed that this institution is the only one of its kind in Scotland. He defended vigorously the specialisation of abdominal surgery (the treatment of ovarian and uterine disease) to which this hospital is to be devoted; and mentioned, among other matters, that the rule which prevails in the London Samaritan Hospital would be adopted here—namely, "the exclusion of every person who was ever in attendance on an infectious case"; an excellent rule, which it is to be hoped will be strictly enforced in every instance. The hospital is opened free of debt, but now appeals to the public for support.

LOCK HOSPITAL.

From the annul report of this hospital we learn that the number of patients under treatment during the past year was 357; the average stay of each patient was 32 nights, and the average cost per patient £1 19*s.* 11½*d.* There had been a large proportion of young girls admitted. For the first time in hospital there were 224; for the second time, 80; third, 25; fourth, 19; fifth, 5; sixth, 3; and only 1 for the seventh time. In the autumn of last year a lady who was under a course of medical study in Glasgow, prior to her going as a medical missionary to Japan, took advantage of the opportunities freely afforded at the Lock Hospital of studying disease, and of witnessing the mode of treatment in young women, and in children as well, at the usual visiting hour, along with the surgeon who was on duty. It is expected that the valuable knowledge and experience then obtained will be of great advantage to the medical missionary in her work.

VITAL STATISTICS.

From Dr. Russell's report for 1885 we learn that during last year there occurred in Glasgow 13,486 deaths as compared with 13,929 in 1884. According to the Registrar-General's estimate of the population, this represents an annual death-rate of 26 in place of 27 per 1000 living. Dr. Russell also reports that the fortnight ending Jan. 2nd, 1886, was exceptionally healthy, the death-rate being 24 per 1000, as against 27·2 per 1000 in the preceding fortnight. This was due to the mildness of the weather and the absence of any prevailing epidemic disease among children. Only one case of small-pox was registered, as compared with four in the preceding fortnight.

IRELAND.

(From our own Correspondent.)

DUBLIN HOSPITAL SUNDAY FUND.

By returns recently published I learn that the contributions towards the Dublin hospitals collected on Hospital Sunday in November last amounted to £3976 10*s.* 11*d.*, and, with special donations not included in the above (£491 14*s.* 9*d.*), make a total of £4468 5*s.* 8*d.* This sum included £58 8*s.* 7*d.*, the proceeds of a football match played by the Leinster Branch of the Irish Rugby Football Union,

on Nov. 7th, 1885. As compared with the year preceding, these returns show an increase of £69 4*s.* 9*d.*, which, considering the greatly depressed condition of the country, must be regarded as highly satisfactory.

THE SANITARY CONDITION OF DUBLIN.

Mr. E. Dwyer Gray, M.P., formerly chairman of the Public Health Committee of the Corporation of Dublin, in a recent communication with Sir Charles Cameron, medical officer of health, states that, notwithstanding all the recent improvements made by the Corporation, the sanitary state of Dublin is still most unsatisfactory. He refers to the probability of cholera reaching our shores this summer, and regards the ashpit system, more especially in relation to tenement houses, as a source of extreme danger both to the inhabitants themselves and to the neighbourhood. Mr. Gray believes that there is only one effective way of dealing with such cases—viz., by the daily removal by the public authority of all the house refuse from such dwellings. He asks Sir Charles Cameron whether this is not the only really effective way of keeping the yards of the houses in the poorer parts of the city in a proper sanitary condition, and so guarding as far as it may be possible, against those insanitary conditions which promote the spread of epidemics such as cholera. Mr. Gray would go further, and make the rule universal that ashpits should be abolished and house refuse daily removed in every part of the city. Sir Charles Cameron, in his reply, agrees with Mr. Gray's statements, and says that he knows of no measure of greater efficacy against the spread of contagious diseases than the prompt and complete removal of filth from dwellings. The storage of effete and unclean matter close to human dwellings he regards as a relic of barbarous ages, and he believes that it was the most potent cause of the terrible mortality of mediæval cities. Should the Corporation see their way to carry out Mr. Gray's proposal for the total abolition of filth receptacles, he thinks that, with such an improvement and with the pure water-supply the city possesses, it would be well prepared to cope with Asiatic cholera should it invade us.

BELFAST MAIN-DRAINAGE BILL.

The Bill for the purification of the River Lagan, and for the construction of works in connexion therewith, to be undertaken by the Corporation of Belfast, came as an unopposed measure last Monday before one of the examiners of the House of Commons. The regulations contained in the Standing Orders were found to have been complied with.

SUICIDE BY A LUNATIC.

On the 15th inst. a lady named Dawson, aged sixty, an inmate of the Richmond Lunatic Asylum, set fire to her clothes and died from the burns she received. Early on Friday morning the deceased set fire to her night-dress by means of a gas jet over the fireplace during the absence of the night nurse, and died the following day. At the inquest held, evidence was given that the gas bracket was seven feet and a half from the ground, and the jury exonerated the officials of the asylum from all blame in respect to the occurrence, Dr. Lalor, the medical superintendent, promising to lay before the governors, at the suggestion of some of the jurors, the necessity of having the gas jets guarded in some fashion.

Dublin, Jan. 19th, 1886.

PARIS.

(From our own Correspondent.)

THE RECENT CASE OF POISONING BY COLCHICINE.

AT the meeting of the Société de Médecine Légale of the 11th inst. a discussion took place on the case of poisoning by colchicine which was reported in THE LANCET some months ago. Professor Brouardel read a note, giving the results of his researches with a view of elucidating the difficult points of the subject. In referring to the chemical part of his work, the author declared that a search for metals in the different viscera and organs of the woman supposed to have been poisoned by colchicine gave no result. The search for alkaloids, of which the reactions are known were equally fruitless. An extract, however, obtained by maceration and division of the kidneys of the woman, to which some nitric acid was added, produced a violet tint, which by the addition of some potash became an orange red. Professor Brouardel remarked that in the present state of our knowledge this double reaction may be legitimately considered characteristic of colchicine, as all the samples of this substance, treated with nitric acid and potash, always produce the same reaction; the urine of a dog to which a certain quantity of colchicine had been administered produced the same tint by the same reagents. Moreover, this reaction has not as yet been produced in any other substance than colchicine. In referring to the physiological parts of his report, M. Brouardel declared that fragments of the viscera of the supposed victim which were injected into the veins of animals, produced no phenomena characteristic of poisoning by colchicine. In conclusion, the author observed that in a case of poisoning there must be perfect concordance between the points of information furnished: (1) By chemical examination, (2) by the necropsy, (3) by chemical analysis, (4) by physiological experiments. In the case under consideration, the hypothesis of poisoning by colchicine was justified by the symptoms observed during life. As regards the autopsy which was performed more than a year after death, no lesion was discovered which would permit one to attribute death to a natural cause. Moreover, the body was in a perfect state of preservation; but it was ascertained that the soil of the cemetery in which the body was interred had the property of preserving corpses for a considerable time. In performing some experiments in view of ascertaining the toxic character of colchicine, Professor Brouardel obtained the following results: Administered in from four to five centigrammes colchicine is dangerous, and ten centigrammes are sufficient to cause the death of a man.

M. PASTEUR ON RABIES.

A young man who was bitten two days ago by a dog immediately took it to the Veterinary School at Alfort to have it examined, but as the animal did not appear to be affected with rabies it was returned to the owner—a proceeding, in my opinion, rather strange, for certainly the animal should have been kept under observation at least for some days. The young man, however, being naturally anxious about himself, wrote to M. Pasteur asking him to appoint an hour to receive him. The illustrious *savant* immediately replied by letter, and, as it is rather instructive, I give it here in its entirety:—"It is useless for you to come. Every mad dog, whether it eats or not, dies from rabies in a few days; if it eats, death takes place a little more slowly, but it never exceeds eight or ten days. In the interval it manifests rabic symptoms. Confine the dog to his kennel, where he must be fed with precaution for at least twelve days. This had better be done under the supervision of a veterinary surgeon. If the dog lives after the time indicated, you may be assured that it is not mad. Meanwhile you have nothing else to care about than the wound caused by the bite. This should not be neglected. The saliva of a dog, even that of a healthy one, contains microbes foreign to the rabic virus, as those microbes might produce abscesses, and, in certain exceptional cases, septicæmia. In case the dog should go mad, come to me without delay, 45, Rue d'Ulm, at 11 A.M., where I will apply the preservative treatment for rabies."

LOUISE MICHEL.

Citoyenne Louise Michel, who has benefited, against her will, by the clemency of the President of the French Republic, in the form of a free pardon, has, since her exit from prison, been in a very excited state. She scarcely ever eats. She is evidently a monomaniac on the subject of revolution, and many people think that she is more fit for a lunatic asylum than a prison. One peculiarity in her may be noticed: she does not eat flesh, alleging as the reason that it comes from animals which have been killed.

The following changes in the staffs of the Paris hospitals are announced:—M. Mesnet takes M. Vulpian's place at the Hôtel Dieu, M. Troisier is appointed to the Saint Antoine, M. Cuffer to the Tenon, and M. Moizard to the Bicêtre. Prof. Gosselin has been elected Vice-President of the Academy of Sciences for the present year. In Bordeaux, M. Gervais has been appointed Surgeon to the Saint André Hospital.

Dr. Hayem has been elected a member of the Paris Academy of Medicine.

The following awards of prizes offered to the internes

or resident medical officers of the Paris hospitals are announced:—Seniors: Gold medal and 1000 francs, M. Gilbert, of the Hôpital Saint Louis; accessit, silver medal, M. Queyrat, of the Hôpital Tenon. Juniors: Silver medal, M. Lejars, of the Hôpital Saint Antoine; accessit, books, M. Dumoulin, of the Hôpital de la Pitié.

Paris, Jan. 19th.

INTRAVENOUS INJECTIONS IN CHOLERA.

(From a Correspondent.)

DURING the epidemics of cholera which visited France in 1884 and 1885, among the various treatments adopted was that of intravenous injections, which had been proposed and practised about fifty years ago. The hospitals where this treatment was largely employed were St. Antoine, at Paris, and the naval hospital of St. Mandries, at Toulon. In the former this treatment was carried out during the epidemic of 1884 by M. Hayem, to whom we are indebted for any exact knowledge of the subject, and who embodied his results in an interesting little book. In the latter the treatment of M. Hayem was adopted by M. Rouvier, during the epidemic which raged at that place last year, and his results formed the subject of a communication to the Académie de Médecine on Oct. 27th. This being the most recent attempt at a definite line of treatment on a large scale, the results obtained are of undoubted interest. The history of the subject is briefly this: In the year 1830, during the epidemic of cholera at Moscow, Dr. Hermann first conceived the idea of preventing the thickening of the blood by means of intravenous injections, and his practice was followed by Dr. Tannichen, of that city, but without any lasting result. In 1832 intravenous injections were used in Scotland, especially by Dr. Latta, of Leith, and five successes were recorded out of fifteen cases in which the injections were used in patients in an apparently hopeless state of collapse. Many were the adverse opinions to this method of treatment, and it was regarded as requiring further extension and experiment before it could be reckoned as one of the means to be adopted in treating cholera. Practically, this was the state of the question when the cholera appeared in Paris in 1884; and M. Hayem, so well known for his researches on the blood, set himself to restudy the question and determine the real value of this plan of treatment. His opportunities were ample, for his service was at the Hospital St. Antoine, situated in the low quarter of Paris, where the cholera made its chief ravages. He had already determined the fact that the injection of distilled water into the circulatory system of a dog up to the extent of from one-twelfth to one-twentieth of its body weight had no effect beyond a passing hæmoglobinuria—that is to say, the amount of fluid in the vessels could be doubled without producing any unpleasant symptoms; and believing that the chief symptom in the algid stage of cholera is the thickened condition of the blood due to the drain of liquid from the alimentary canal, he came to the conclusion that the right line of treatment was that of intravenous injection, as there was no hope of the absorption of fluid by the alimentary canal. According to his view, the phenomena of the algid stage of cholera were due to the state of the blood and the hindered circulation, and he proved by numerical enumeration of the blood-corpuscles that the fluid in the blood was much reduced—in fact, he found an augmentation of 1,500,000 corpuscles per cubic millimetre, and from this he concluded that the total mass of blood was reduced by about one quarter. The fluid which he used for injecting was—

Distilled water	1000
Chloride of sodium	5
Sulphate of sodium	10

The amount injected varied from two litres to two litres and a half, and it was heated up to 38°C. Sometimes a second, and even a third, injection was made. The injections were only made in the gravest cases, a fact which must be borne in mind in looking at the results. Altogether the transfusions were made in ninety cases, of which sixty-three died and twenty-seven survived—that is to say, the percentage of cures was thirty. But the general impression left on the mind of the observer was that this mode of treatment was of great value, and "that intravenous injection in cholera constitutes the surest and quickest means of bringing about the reaction. It exposes the patients to no danger, and therefore it is the duty of the physician to adopt it as quickly as possible, before this terrible disease has determined grave lesions in the body which offer obstacles to a reaction. In a word, transfusion ought now to be considered as a regular and not exceptional method of treatment, which, rational and scientific as it is, promises to soon hold the first rank among the treatments of the choleraic collapse."

Such being the results obtained by M. Hayem, it was natural that the method found a further extension in the cholera epidemic of last year; and in the naval hospital of St. Mandries at Toulon, this method of treatment was adopted in fifty-five cases, of which thirty-seven died and eighteen recovered, or a percentage of cures of 33, which approaches the figure obtained by M. Hayem. The cases in which the treatment was tried were extremely grave, and it was adopted as a last resource, after other means had been tried, and when, in spite of these, the patients were in a state of collapse and asphyxia. The physician of St. Mandries was also convinced of the value of intravenous injections as a means of bringing about the reaction in the algid stage of the disease. Whatever be the views held as to the nature of cholera, it would appear that in intravenous injections a valuable means exists to combat the asphyxia and collapse, which must soon end in death, caused, as they appear to be, by the reduced condition of the blood and general dehydration of the whole body, which in its turn owes its origin to the intestinal flux. The opinion as to the origin of the intestinal drainage varies with the view we adopt as to the essential nature of cholera; a point into which I will not now enter.

Obituary.

WILLIAM BOUSFIELD PAGE, F.R.C.S.

WILLIAM BOUSFIELD PAGE died at his residence, St Ann's, near Carlisle, on January 6th, and by his death there has passed away a notable figure in the social and professional life of Cumberland. Born of a good Essex family in the year 1817, he early chose surgery as his profession, and with a view to its study entered the London Hospital as an apprentice to the late Mr. John Scott. There his ability soon gained him recognition, and he became a favourite pupil of his great master. In 1841 the edifice of the Cumberland Infirmary was complete, and it became necessary to appoint to it an acting staff. An able physician was readily found in the person of the late Dr. Barnes; but owing to difficulties with the local medical men—the memory of which is best forgotten—an influential deputation of county gentlemen, of which Bishop Percy was the head, entered into communication with Mr. Scott with a view to the selection of a competent surgeon for the institution, and he, being especially rich in the brilliancy of his pupils, offered the post first to Mr. Curling, then to the late Mr. Critchett, and next to Mr. Page. This association with those who have become cosmopolitan leaders in surgery stamps the early reputation and acquirements of him whose loss we deplore as being of the very highest. In an address delivered to the Medical Society of Carlisle last year, and of which he was the first president, he described how cold and cheerless his first winter journey to the North was, a forecast it may well have seemed to him in after-times of the character of his reception by his professional brethren, and of the then aspect of the institution to which he was appointed, for he found "it with an old man and woman occupying the kitchen, and otherwise every room empty." But he was daunted by neither. Patients soon came to him, and the empty hospital wards, with their comparatively aseptic atmosphere, soon became the location of many brilliant successes in surgery. In these times, when the use of anæsthetics is universal, when ovariotomy is justly regarded as one of the most beneficent of surgical operations, and when the results of excision of the knee have established its value as an operative procedure, it may seem strange that there was opposition to the introduction of any one of them, and especially strange that

obloquy should have attached to those who were bold enough in earlier days to carry them out. But so it was, and it is strong proof of the force and the faculty Mr. Page possessed when we find him a pioneer among those whose labours have rendered, by the establishment of the procedures referred to, our art richer and more beneficent, and suffering humanity still more largely our debtors. In THE LANCET of April 5th, 1845, appears the first notice of his success as an ovariotomist, and although within a comparatively short time (December, 1846) he published in the pages of the same journal an unsuccessful case, his hand was not stayed as an operator, and happily recovery followed in his succeeding operations. The case which terminated unsuccessfully was one of incomplete operation—extensive intestinal adhesions the cause of this; and in its result Mr. Page deplores, what even the vast experience of to-day has not altogether solved, the difficulty of diagnosing the existence and the situation of pronounced adhesions. Excision of the knee was also successfully carried out by him at a time when its reputation was of a very uncertain character; and the fact that in 1846 he had attained perfect results in two cases shows how alive he was to the advantages of conservative surgery. His predilection in this direction is further evidenced by a paper which was brought before the Medico-Chirurgical Society in 1850, and which we believe has a place in the Transactions for that year, as to the advantages in certain cases of disease of the os calcis of excision of the bone over the then almost universal treatment by amputation of the foot. The plan upon which he performed the operation is a good one, for it enabled him, had he in the progress of the excision found the other bones of the tarsus implicated, to have completed by the addition of the dorsal incision an ordinary amputation at the ankle. In the *Monthly Medical Journal* for February, 1847, there appears from his pen a most able, interesting, and instructive article on a case of spina bifida, in which the external tumour was successfully removed. Success in this operation, sometimes regarded as one of the triumphs of antiseptic surgery, was thus attained even in other days, and although the benefit which followed it was so great that its subject is now a woman in her prime, Mr. Page, with that sagacious character of mind which so distinguished him, defines in the most unmistakable way the small number of cases in which this method is applicable, the reason for adopting it, and the dangers which may follow its employment.

In such a sketch as this it is impossible to notice all the many ways in which he proved himself an able and enterprising surgeon, but those to which we have made reference may be regarded as typical of the method of the man: always interested in what was new and likely to be of benefit; always anxious to ascertain for himself the measure of this, and, despite the issue, to give his experience in the interests of his art. Lithotomy, of which he had many successful cases; acupressure in the arrest of hæmorrhage; the treatment of ununited fracture; the successful treatment of tetanus by the administration of aconite—on all these subjects he has left important records, which, though written long ago, may be studied now with interest and with gain.

What the profession thought of his labours is marked by the fact that in 1858 he was made a Fellow of the College, and that at even an earlier date the late Sir Benjamin Brodie used such influence as he possessed to induce Mr. Page to become a candidate for the post of surgeon to St. Mary's Hospital, a post which, singularly enough, is now held by his eldest son, Mr. Herbert Page. As, however happens to few men at so early a period of their lives, his time became too fully occupied to have leisure for literary work, for we soon find him the confidential adviser of the best families in Cumberland, and a recognised leader in his profession; and this position he maintained for nearly forty years, carrying on a family practice of the most select class, acting as a consultant over the greater part of the north of England and far across the Scotch border, always full of vigour, full of resource, and of wisest counsel. Added to all this, he had certainly one of the largest and widest connexions in the county as a railway surgeon; in this especial walk he began his work, as he did it in the Cumberland Infirmary, with the rise of the field for its exercise. The Lancaster and Carlisle Railway joined Carlisle to the southern systems, and Mr. Page was requested to act as medical adviser to its board of directors. This was a delicate post for the young surgeon to occupy, for it of necessity involved, not the mere dealing with traumatisms (with which he was perfectly familiar), but with that of compensation for injuries received—always, as we believe, a difficult task. With Mr. Page, however, there was no difficulty; the combination of abilities he possessed, and which we once heard well expressed by a man who was no mean judge of men, "that he was by nature gifted to be a good surgeon, a greater advocate, or a still greater financier," carried him through all exigencies, and in examining a "railway case," or in giving his testimony regarding it, it was felt that the opinion given was one that only a man gifted with perspicuity and wisdom could have formed. These gifts of perspicuity and wisdom, associated as they were with extraordinary shrewdness and ripe experience, made him much sought after as a consultant, and with medical men in the north there now arises the feeling that a wise friend and a prudent counsellor has passed from them. Educated at a time when the art of physical diagnosis was comparatively in its infancy, and when the training of the student was very different from what it is to-day, Mr. Page still managed to keep well abreast of the time, and to some of us it frequently seemed little short of marvellous how, without the use of such means as we of necessity employ, he with that acumen which the long years of work had given him, could make a more rapid and often a more accurate diagnosis.

Within a few days after his death the regret and sense of loss which had come to the profession in Carlisle and its neighbourhood found eloquent expression through Mr. Hull, the president of the local branch of the British Medical Association, who dwelt with emphasis upon the fact that one of the most successful endeavours in Mr. Page's life had been to better in every way the status of the medical man.

A man of iron physique, of strongest mental capacity, full of restless energy and of indomitable power of will, he yet possessed withal, and so largely, the better gift of a tender heart, that, directly through its influence, rest came to him, for he died from one of those mysteriously progressive forms of anæmia the starting-point of which seemed to lie in the shock of a heavy personal sorrow. Thus has closed a career of remarkable ability, singular usefulness, and extraordinary personal influence; and the thought comes to us sadly how much of wisdom, how much of knowledge, how much of the light collected by a life of experience and observation has perished with him, for the position he held never appeared more truly unique than it does now: it was one that no other man will ever hold.

THOMAS CECIL MORGAN, L.R.C.S. EDIN., L.K.Q.C.P.I.

NEW SOUTH WALES has sustained severe losses in the medical profession during the last six months; George Fortescue, Annesley West, and now Cecil Morgan, having joined the great majority. Cecil Morgan was one of a large family, and was born Jan. 13th, 1837, at Selsey Rectory, Sussex. Entering Trinity College as an engineering student, he changed his mind and turned his attention to medicine, qualifying in Edinburgh and Dublin in 1857 and 1858 respectively. He went to New South Wales almost immediately, and began practice at Gundagai, a town on the banks of the Murrumbidgee, where he remained for two years, returning to England in 1860 and entering the Army Medical Department. After some service in India he was invalided home, and was placed in charge of the ophthalmic wards at Netley. Retiring on half-pay, he was appointed resident surgeon at Moorfields, which office he held for some years, but the first warning of phthisis compelled him to seek a milder climate, and he went again to New South Wales. He was elected surgeon to the Sydney Hospital in 1878, and senior ophthalmic surgeon to the Ear and Eye Branch at Moorcliff in 1882. In 1883 he was appointed ophthalmic surgeon to the Goverment institutions at Parramatta and Liverpool, which office he held till his death on Nov. 24th, 1885.

Cecil Morgan's death leaves a great gap in the ranks of the profession in New South Wales. As a general operating surgeon he had few if any equals, and as an ophthalmic surgeon he was for years at the very head of his profession. As a teacher he was unrivalled. Unassuming and retiring almost to a fault, he did not make many friends, but those who were intimate with him, and were privileged to call him friend, knew well the gentle and amiable heart that beat under so quiet an exterior.

THOMAS WILLIAMSON, M.D.

On the 30th ult. the death occurred at Leith from apoplexy of Dr. Williamson. Born at Greenock in 1815, the deceased received his medical education at Edinburgh University, and in 1836 obtained the degree of Doctor of Medicine, in the same year becoming a Licentiate of the Royal College of Surgeons, an institution of which he was elected a Fellow in 1857. He was one of the oldest members of the Medico-Chirurgical Society and of the Royal Society, Edinburgh. He practised for half a century in Leith, and was universally and deservedly respected and esteemed. For thirty years he was surgeon to the local hospital, and at the time of his death held the appointments of parochial medical officer and public vaccinator for the parish of South Leith and medical officer of health for the entire burgh.

Medical News.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following gentlemen passed their Primary Examination in Anatomy and Physiology at a meeting of the Board of Examiners on the 13th inst., and when eligible will be admitted to the Pass Examination:—

ANATOMY AND PHYSIOLOGY.—Sidney A. Bontor and Francis W. Tunnicliffe, St. Bartholomew's Hospital; Herbert V. Hickman and Edward H. Baldock, Guy's Hospital; George A. Ballingall, Edinburgh University.

ANATOMY ONLY.—Edmund R. Kavanaugh, Guy's and Westminster Hospitals; Albert B. Harman, Henry B. Falconer, and William J. Rugg, King's College Hospital; David T. Jones, Guy's Hospital; C. J. Paterson and Leslie M. Stocken, University College Hospital; Daniel J. P. McNabb, Newcastle and London Hospital; Edward J. Cross, St. Thomas's Hospital; Charles M. Leakey, London Hospital; George E. G. Metcalfe, St. Bartholomew's Hospital; Arthur G. N. Goldney, Charing-cross Hospital; Reginald F. H. Newton and Sidney D. Graham, St. George's Hospital; James D. H. Smyth and Robert B. Fergusson, St. Mary's Hospital.

PHYSIOLOGY ONLY.—Philip Johnson and George D. Parker, St. Bartholomew's Hospital; Henry B. Statter, Robert W. Rouw, and Arthur R. F. Evershed, Guy's Hospital; Hubert B. Blake, University College Hospital; Reginald Hedley, Bristol Medical School; Charles J. P. Hogarth, Melbourne and St. Bartholomew's Hospital; Ernest Carter and James L. S. Sherlock, London Hospital; Arthur Charles A. Lovegrove, Westminster Hospital; Robert R. Hatherell, St. Thomas's Hospital; Reginald Thorpe, St. George's Hospital; Alfred R. Sieveking, St. Mary's Hospital; Murdock Chisholm, McGill College, Montreal.

Passed on the 14th inst.:—

ANATOMY ONLY.—Frederick R. Hird and Arthur James Lambert, Leeds School of Medicine; Joseph Farrall Wright, Owens College, Manchester; William C. Costine, University College, Liverpool; Harry F. Devis, Bristol Medical School; Charles Graves, St. Mary's Hospital; Frank Osborne and Charles H. Andrews, St. Thomas's Hospital; Hubert A. Bray, King's College; Richard A. Smith and William W. Craig, University College; James V. Albert and George T. Mould, St. George's Hospital; Thomas H. Valintine, St. Bartholomew's Hospital; Albert E. Tebb and Richard G. Pollock, Guy's Hospital; John P. De Buriatta and Joseph R. Gallard, London Hospital; Reginald Roberts, Middlesex Hospital.

PHYSIOLOGY ONLY.—George Thorpe, Sheffield Medical School; Neal Nelson, Dublin; Edward Foxton, Kingston, Canada; Abraham J. Mener, New York; Henry W. C. B. Cave, Queen's College, Birmingham; William V. Tanner, Hugh C. Addison, and William D. Wells, King's College; George H. Thompson, Richard H. Wellington, and Charles S. Fisher, St. Bartholomew's Hospital; Norman Robinson and William H. Robinson, St. George's Hospital; Daniel F. Roberts, Manchester and Guy's Hospital; Joseph S. Bradish, Frederick M. House and Campbell R. Adams, St. Thomas's Hospital; Philip K. O'Brien and Arthur L. Fuller, University College; Edward O. Kingdon, St. Mary's Hospital.

The following gentlemen, having undergone the necessary examinations, were admitted Members of the College at a meeting of the Board of Examiners on the 18th inst.:—

Benson, Matthew, L.R.C.P. Lond., Wigan.
Burnett, Reuben, L.R.C.P. Lond., Onecote, Staffs.
Clarke, Edmund Wearne, M.B. Edin., Edinburgh.
Edye, John Simpson, L.S.A., Elgin-road.
Furrer, Edward, M.B. Toronto, St. Louis, Canada.
Hawley, Harold Heber, M.B. Toronto, Trenton, Ontario.
Logan, John Rannie, M.D. Toronto, Toronto, Canada.
McNabb, Daniel J. Patrick, L.R.C.P. Ed., Newcastle-on-Tyne.
Maloney, William Robert Nuttall, L.S.A., Melbourne.
Niven, George, M.B. Cantab., Greenwich.
Pickthorn, Alfred John, L.S.A., Wetherby-terrace.
Rendall, Percy John, L.S.A., Ladbroke-square.
Revely, Joseph Smith, M.B. Durham, South Shields.
Trask, John Ernest, Bath.

Admitted on the 19th inst.:—

Daniel, Frederick Edwin, Birmingham.
Dawson, Arthur Willan, M.B. Durham, Liverpool.
Evans, Williams, L.K.Q.C.P.I., Liverpool.
Facey, William Edwin, M.B. Cantab., Abergavenny.
Felix, Edward, L.R.C.P. Lond., Shirland-road.
Harvey, John Thomas, M.B. Edin., Victoria, Australia.
Hill, Alfred William, L.S.A., Adelaide.
Jolly, Sydney Blake, L.S.A., Lansdown, Bath.
Jowers, Reginald Francis, L.S.A., Brighton.
Male, Herbert Christopher, M.B. Edin., Stone, Staffs.
Montague, Arthur John Helm, L.S.A., Notting-hill.
Roach, George Ernest, L.S.A., Plymouth.
Sharman, Mark, M.B. Glasgow, Wellingborough.
Sugden, Edgar Brewitt, L.S.A., Hampstead.
Weaver, John James, L.S.A., Southport.
Wright Robert Wallace, Holland-road.

Admitted on the 20th inst.:—

Bates, George Tweedie, L.S.A., Bredwardine.
Billups, Percy Christopher C., L.R.C.P. Lond., East Dulwich.
Cavell, Herbert Bertram, L.S.A., Brook-street.
Cottell, Reginald James Cope, L.R.C.P. Lond., Cheyne-row.
Freeman, Ernest Carrick, L.R.C.P. Lond., St. George's-square.
Girvin, John, Mecklenburgh-square.
Hill, Joseph Shuter, L.R.C.P. Ed., Mecklenburgh-square.
Hughes, Morgan, Croydon.
Lyndon, Arnold, L.S.A., South Hampstead.
Otway, Henry Carrol, L.R.C.P. Lond., Kennington-park-road.
Rigge, John Arthur, L.S.A., Grays, Essex.
Roberts, Leonard, L.S.A., Bishopsclyford.
Thorpe, Vidal Gunson, L.S.A., Camberwell.
Thomas, John, L.R.C.P. Lond., St. Peter's-street.
Volckman, Bernard, L.S.A., Stapleford, Notts.
Watts, Alfred Thomas Guy, L.S.A., Buckingham-palace-road.

The following gentleman passed in Anatomy on the 12th inst., but was omitted in the list published:—

N. Sisca, of Naples.

COLLEGE OF PHYSICIANS IN IRELAND.—At the January examinations the following obtained the Licences in Medicine and Midwifery of the College:—

MEDICINE.—Sydney Joseph Armstrong, William Vincent Barré, William Evans, George Fisher, Frederick Hall, Frederick Bernard Musgrave, Edward Nangle Smartt, Graves Stoker.

MIDWIFERY.—William Vincent Barré, Michael Patrick Dunlea, George Fisher, Henry Croker Garde, Frederick Hall.

The undermentioned were admitted Members:—

Ephraim MacDowell Cosgrave; W. Beatty.

SOCIETY OF APOTHECARIES.—The following gentleman passed the examination in the Science and Practice of Medicine, Surgery, and Midwifery, and received a certificate to practise, on the 14th inst.:—

Oakman, Joseph John, The Priory, Battersea.

The following passed the examination in the Science and Practice of Medicine, and received certificates to practise:—

Pisani, Lionel John, Rockmound-road, Upper Norwood.
Teasdall, Walter John, M.D. University of Victoria, Aurora, Ontario, Canada.
Thorpe, George, Stoke Newington-road.
Wilkin, Griffith Charles, Hyde-park-street.

The following gentlemen passed the examination in Arts on the 8th and 9th inst.:—

FIRST DIVISION.

Winter, George Mitchell.

SECOND DIVISION.

Atkinson, J. C.	Knox, S. G.
Bonner, E. A.	Laver, P. G.
Buck, A. H.	Liversidge, A. A.
Chater, A. R.	Moore, H. St. B.
Davies, A. N.	Nall, J. F.
Denne, F. V.	Ouston, T. G.
Eastment, J. W.	Ringrose, E.
Flegg, P. A. M.	Savery, W. H.
Fuller, G. S.	Shepard, R. H.
Garrard, G.	Soltan, H.
Hern, G.	Whitehead, E. T.
Johnston, D. C.	Wood, G. E. M.
Kellman, J. C.	

Passed in Elementary Mechanics alone:—

Addie, A.	Lockyer, G. E.
Barnes, H. C.	Long, H. B.
Castellotte, B. A.	Meadows, A. H.
Dudley, A. D. P.	Rayner, D. C.
Dunn, R. A.	Sutherland, F. C.
Dryland, L.	Twynam, A. E. E.
Everett, E. W.	White, E. T.
Holden, G. B.	Garrett, J. H.
Jones, J. H.	Sheen, F. F. S.
Lang, E. J.	

On the 20th inst. the death of a young man from hydrophobia occurred in Guy's Hospital.

Senores Sanchez Ocana, Candela, and Ledesma have been appointed Court physicians to the Queen of Spain.

EDUCATION OF THE BLIND AND THE DEAF AND DUMB.—The Queen has, on the recommendation of the Home Secretary, approved of the inquiry now being held by Royal Commissioners into the education of the blind being so extended as to include the education of the deaf and dumb and such other cases as would seem to require exceptional methods of educational treatment.

THE Hospital Sunday collection at Poole was held on the 10th inst.

IT is proposed to erect, by public subscription, a wing to one of the Melbourne Hospitals as a memorial to Sir Moses Montefiore.

AT the usual bi-monthly meeting of the Hackney District Board of Works on the 13th inst., Dr. Tripe, the medical officer of health, reported a severe outbreak of typhoid fever at the convent in Hassett-road, South Hackney.

DOVER HOSPITAL.—The annual meeting of this institution was held on the 20th inst. It was stated that the number of patients treated during the year was 4459, and the expenses had been kept well within the income, which had amounted to £1137.

QUEEN'S COLLEGE, BIRMINGHAM.—THE INGLEBY LECTURES.—The second of these lectures, "On Some Functional Disorders of Females," will be delivered by Dr. Wade, F.R.C.P., Senior Physician to the General Hospital, on Thursday, the 28th inst., in the Theatre of the College, at 4 o'clock. Subject: "Some Nervous Disorders."

NEW HOSPITAL IN HABANA.—The new hospital of Our Lady de las Mercedes, in the neighbourhood of Habana, is expected to be complete and ready for the reception of patients, who will be transferred from the old hospitals of St. Philip and Santiago. The new building is said to have been constructed in accordance with the most approved hygienic models.

BIRMINGHAM AND MIDLAND SKIN AND LOCK HOSPITAL.—The Committee of this hospital have taken a piece of land in the centre of the town on which they intend building a new hospital. This will enable them to provide medicinal baths and beds for in-patients. For a long time past their present premises have been insufficient for the accommodation of the increasing number of patients applying for relief.

BOURNEMOUTH SANITARY HOSPITAL.—This new institution, which has been erected at a cost of £3900, was opened on the 13th inst. Accommodation is provided for six adults two children. Attached to the hospital is a very complete and apparatus for the disinfection of clothing by steam, and the sanitary arrangements are of a most satisfactory character.

ST. JOHN AMBULANCE ASSOCIATION.—A most promising centre has been formed in the Isle of Man. The inaugural meeting was held at Douglas on Monday, Jan. 18th. Surgeon-Major Hutton delivered an address on the aims and objects of the association. His Excellency Spencer Walpole, Lieutenant-Governor, President of the Centre, occupied the chair, and was supported by a considerable number of the local practitioners and committee-men.

NORTHERN HOSPITAL AMBULANCE.—The members of the Liverpool Junior Reform Club some time ago made a collection for the benefit of the deserving poor. The whole of the money was not expended, and a balance of £60 has just been handed to the treasurer of the Northern Hospital Ambulance Fund, on the condition that the ambulance is maintained at work during the whole of the present year, a condition which has been gladly assented to by the committee of the fund.

INSANITARY HOUSES.—In an action recently brought by a landlord to recover rent for a house, the defendant alleged that the insanitary state of the drains and the dampness of the building had caused such severe illness to himself and family that his medical attendant had advised his leaving it. The judge directed the jury that in the case of an unfurnished house there was, in letting it, no implied contract that it should be fit for the purpose of the person who took it. Judgment was accordingly given for the plaintiff.

THE FRENCH ACADEMY OF MEDICINE.—The names submitted by the Committee of the French Academy of Medicine, in addition to that of Sir Joseph Fayrer, who as we announced last week, was elected to fill the vacancy in the foreign corresponding members, were those of M. Thybaidos of Athens, and Dr. Bateman of Norwich. The voting was as follows:—Fayrer, 43; Thybaidos, 16; Bateman, 6. For the vacancy occasioned in the ordinary members, section of Therapeutics, by the death of M. Dechambre, founder and editor for some twenty years of the *Gazette Hebdomadaire*, and editor of the magnificent "Dictionnaire Encyclopédique des Sciences Médicales," five names were proposed—MM. Desmos, Dumontpallier, Hayem, Hallopeau, and Ferrand. The contest lay between MM. Hayem and Desmos, M. Hayem obtaining 44 votes against 38 given to M. Desmos. M. Hayem was therefore declared elected.

NORTH-WEST LONDON HOSPITAL.—A concert for the entertainment of the patients and friends of this hospital took place on the 14th inst. in the male ward of the institution.

SANITARY ASSURANCE ASSOCIATION.—At the Parkes Museum of Hygiene on the 20th inst., Mr. T. Roger Smith, Professor of Architecture, University College, delivered a lecture on "A Damp House." The chair was occupied by Sir Joseph Fayrer, and at the close of the address an interesting discussion, in which several members of the association joined, took place. On the 27th inst., a lecture on "Preventable Diseases" will be delivered by Mr. Jesset medical officer of health for Erith. These lectures are free to all, no tickets being required, and discussion is invited.

ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—The third of six winter evening conversaziones was held at this hospital on Friday, Jan. 15th. The surgeons present were Mr. Cowell and Mr. Hartridge. The following were among the cases shown: Glaucoma in a child aged fourteen; New Growth in Vitreous; Atrophy of Choroid; Dislocation of Lens; Large Hœmorrhage at Macula (three cases); Hœmorrhagic Retinitis; Optic Neuritis; Optic Atrophy; Congenital Crescent; Embolism of Central Artery of Retina; Conical Cornea, &c. The conversazione was largely attended.

LIVERPOOL MEDICAL INSTITUTION.—At the annual meeting, held on Thursday, Jan. 14th, the following list of officers, council, and microscopical committee was adopted:—President: Dr. J. Birkbeck Nevins. Vice-Presidents: Mr. Frank T. Paul, Dr. Burton, Dr. Alexander, and Dr. James Barr. Hon. Treasurer: Dr. F. J. Bailey. Hon. Gen. Secretary: Dr. Bernard. Hon. Sec. of Ordinary Meetings: Dr. W. Williams. Hon. Librarian: Mr. R. Williams. Council: Dr. J. Cameron, Mr. R. Hamilton, Dr. Harvey, Dr. Prytherch, Mr. Sheldon, Mr. H. O. Thomas, Dr. A. Davidson, Dr. Davies, Dr. Robert Gee, Mr. N. K. Marsh, Mr. D. Harrisson, and Dr. Wollaston. Microscopical Committee: Dr. Alexander, Dr. Barron, Dr. Braidwood, Dr. Briggs, Dr. Hyla Greves, Mr. G. Hamilton, Dr. Hicks, Dr. Logan, Mr. Rushton Parker, Mr. Frank T. Paul, Dr. J. Wiglesworth, and Dr. W. Williams. Auditors: Mr. C. G. Lee and Dr. H. Harvey.

MANCHESTER MEDICAL SOCIETY.—At the annual meeting of this Society on the 13th inst., a highly satisfactory report was read. The number of members is 242, an increase over the number of the previous year; and the balance in the hands of the treasurer is £253, as compared with £139 at the date of the last annual report. The following is a list of office-bearers for 1886:—President: Dr. J. Hardie. Vice-Presidents: Dr. Julius Dreschfeld, Dr. C. E. Glascott, Mr. G. W. Smith, and Mr. A. W. Stocks. Treasurer: Dr. David Little. Secretary: Mr. F. Armitage Southam, M.B., 242, Oxford-road, Manchester. Other members of Committee: Drs. C. J. Cullingworth, W. Young Martin, Siegmund Moritz, P. H. Mules, F. Morrish Pierce, C. Jeremiah Renshaw, T. Wemyss Rhodes, J. Ross, W. Japp Sinclair, and W. Yeats, Mr. E. Stanmore Bishop and Mr. A. Harry Young, M.B.

GREAT NORTHERN CENTRAL HOSPITAL.—The general council of this hospital met this week in the board-room of the institution, Caledonian-road, when Mr. C. T. Murdoch, M.P., who presided, reported that an eligible freehold site for the new hospital had been secured in the Holloway-road at a cost of £7500. Provision would be made for 150 beds, and the cost would not exceed £200 each bed. £2000 was necessary for the out-patients' department, and altogether £32,000 was required for the building, without furniture. It was estimated that £5000 would cover the expense of furniture and other charges. Towards the total cost £10,500 had been actually subscribed and promised, out of which the cost of the site had already been defrayed. Then there was a realisable asset in the long lease of the present hospital premises, which were ill-adapted to the purposes they had hitherto served. It was anticipated that the foundation stone of the new hospital would be laid during the ensuing spring.

Medical Appointments.

Intimations for this column must be sent DIRECT *to the Office of* THE LANCET *before 9 o'clock on Thursday Morning at the latest.*

COUNSELL, H. E., M.R.C.S., has been appointed Resident Obstetric to Guy's Hospital.

DONALDSON, R. L. S., A.B., M.B., B.Ch.Dub., has been appointed Assistant-Resident Medical Superintendent to the Monaghan and Cavan District Lunatic Asylum, Monaghan.

FENTON, GEORGE, M.R.C.S., L.S.A.Lond., has been appointed Medical Officer to the Western Dispensary, Rochester-row, S.W., vice Francis Pearse, M.R.C.S., L.S.A.Lond., resigned.

HARSANT, J. G., M.B., B.S.Lond., has been appointed Resident Obstetric to Guy's Hospital.

MARSDEN, R. S., M.B., C.M.Ed., has been appointed Medical Officer for the Billington District of the Malton Union.

NIVEN, J., M.A., M.B., has been appointed Medical Officer of Health for the Borough of Oldham, vice Hill, deceased.

PHILPOTS, E. P., M.D., has been appointed Resident Physician to the Mont Dore, Bournemouth.

WALDO, F. J., M.A., M.D.Cantab., M.R.C.S., has been appointed Honorary Medical Officer to the Kensington Dispensary.

WARWICK, PERCY, L.R.C.P., M.R.C.S., has been appointed Medical Officer for the Second District of the Blything Union.

Births, Marriages, and Deaths.

BIRTHS.

BARLOW.—On the 18th inst., at Alma Villa, Dalston-lane, E., the wife of T. Carey Barlow, L.R.C.P.Ed., of a son.

BRUCE.—On the 17th inst., at City-road, the wife of Robert Bruce, M.R.C.S., of a daughter.

JOHNSTON.—At Spital-hill, Sheffield, the wife of Dr. Johnston, of a son (stillborn).

KIDD.—On the 15th inst., at 2, Cromwell-road, West Brighton, the wife of Leonard Kidd, M.R.C.S., L.R.C.P.Ed., of a son.

KILNER.—On the 12th inst., at Guildhall-street, Bury St. Edmunds, the wife of Charles Scott Kilner, M.B., of a son.

MOORE.—On the 19th inst., at Woodside, Keston, Kent, the wife of Norman Moore, M.D., Warden of the College of St. Bartholomew's Hospital, of a daughter.

ROSSITER.—On the 16th inst., at Cairo Lodge, Weston-super-Mare, the wife of George Frederick Rossiter, M.B.Lond., of a son.

THOMSON.—On the 17th inst., at Sinclair-road, Kensington, the wife of G. Crawford Thomson, M.B., M.R.C.S., of a son.

MARRIAGES.

CHAPMAN—MACKENZIE.—On the 14th inst., at 34, Regent-terrace, Edinburgh, by the Rev. P. Hay Hunter, Minister of the Parish of Elie, James Milne Chapman, M.B.Edin., M.R.C.S.Eng., of Inverness, to Eliza Georgina, daughter of the late A. F. Mackenzie, of Kessock, Inverness-shire.

FERGUSON—BOOTE.—On the 13th inst., at the Parish Church, Ashton-on-Mersey, James Mitchell Ferguson, M.B., of Hounslow, to Jane Beatrice Margaret, elder daughter of Daniel Boote, of Ashton-on-Mersey and Manchester.

HUMPHREYS—DIGHT.—On the 13th inst., at Tollerwhelm Church, Richard Humphreys, M.B., C.M.Ed., of Grassendale, Liverpool, to Amy Mary, eldest daughter of John Dight, Esq., of Tollerwhelm, Beaminster, Dorset, and late of Martock, Somerset.

LINDSAY—ELLIOT.—On the 14th inst., at Brinsop Church, Herefordshire, W. Lindsay, M.R.C.S., to Anne Alison, elder daughter of the Rev. W. Elliot, Vicar of Brinsop.

MCGEAGH—MORICE.—On the 14th inst., at St. Stephen's, Paddington, London, by the Rev. W. S. Carter, R. T. McGeagh, M.D., Surgeon, A.M.S., to Ida C. Napier, eldest daughter of Morice Pacha, R.N., of Alexandria, Egypt.

VERITY—HOGG.—On the 19th inst., at Melbourne, Herbert Wilfred Steele Verity, M.R.C.S., L.R.C.P., fourth son of G. Hamilton Verity, Esq., to Agnes Emily, elder daughter of the late Captain W. Dinwiddie Hogg, D.A.C.G., H.E.I.C.S.

DEATHS.

FOWKE.—On the 17th inst., at Walton-on-the-Naze, Essex, Frederic Gustavus Fowke, M.R.C.S., formerly of Manor House, Charwelton, the eldest surviving son of the late Rev. Thorpe William Fowke, Vicar of Sudbury, Suffolk, in his 71st year.

KIRKMAN.—On the 11th inst., at Westergate, Melville-road, Redland, very suddenly, Joseph Thos. Kirkman, F.R.C.S., late of Horndean.

LEESON.—On the 13th inst., at Bath, Margaret Anne, the dearly-loved wife of J. R. Leeson, M.D., F.G.S., of Twickenham, after three days' illness of acute rheumatism and cardiac thrombosis, aged 36.

LITTLETON.—On the 16th inst., at his residence, Well-park, Saltash, Nicholas Littleton, M.R.C.S., Fleet-Surgeon R.N., aged 66.

MORGAN.—On the 14th inst., at Feltham, Middlesex, Charles Morgan, M.R.C.S., late of Bedford-row and Bedford-place, Russell-square, in his 86th year.

OSBORNE.—On the 15th inst., at Southwell, Notts, of concussion of the brain, John Henry Osborne, M.R.C.S., L.S.A.Lond., aged 64.

ROWBOTHAM.—On the 17th inst., at Woolwich, Wm. Rowbotham, M.R.C.S., son of the late S. Rowbotham, of Manchester, in his 67th year.

SMITH.—On the 14th inst., at Bishop's Lydeard, John Smith, M.R.C.S., L.S.A.Lond., aged 67.

WORKMAN.—On the 11th inst., at Titherley, Teignmouth, Charles John Workman, M.D., aged 46.

N.B.—A fee of 5s. is charged for the Insertion of Notices of Births, Marriages, and Deaths.

Medical Diary for the ensuing Week.

Monday, January 25.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10.30 A.M., and each day at the same hour.

ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1.30 P.M., and each day at the same hour.

HOSPITAL FOR WOMEN, SOHO-SQUARE.—Operations, 2 P.M., and on Thursday at the same hour.

METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.

ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.

CENTRAL LONDON OPHTHALMIC HOSPITALS.—Operations, 2 P.M., and each day in the week at the same hour.

SOCIETY OF ARTS.—8 P.M. Prof. H. S. Hele Shaw: Friction (Cantor Lecture).

MEDICAL SOCIETY OF LONDON.—8.30 P.M. Dr. Thudichum: On the Theory of the Febrile Process, its accompanying Chemical Changes and the Modes in which it produces Death and Immunity.—Mr. Walter Pye: Pyæmia after Removal of a Sarcomatous Tumour from the Base of the Skull.

Tuesday, January 26.

GUY'S HOSPITAL.—Operations, 1.30 P.M., and on Friday at the same hour. Ophthalmic Operations on Mondays at 1.30 and Thursdays at 2 P.M.

ST. THOMAS'S HOSPITAL.—Ophthalmic Operations, 4 P.M.; Friday, 2 P.M.

CANCER HOSPITAL, BROMPTON.—Operations, 2.30 P.M.; Saturday, 3.30 P.M.

WESTMINSTER HOSPITAL.—Operations, 2 P.M.

WEST LONDON HOSPITAL.—Operations, 2.30 P.M.

ROYAL INSTITUTION OF GREAT BRITAIN.—3 P.M. Mr. R. Stuart Poole: Naucratis.

ANTHROPOLOGICAL INSTITUTE OF GREAT BRITAIN AND IRELAND.—8 P.M. Annual General Meeting.

SOCIETY OF ARTS.—8 P.M. Mr. Arnold White: The Importance of a National Scheme of Emigration for the Best Interests of British Commerce.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.—8.30 P.M. Dr. William Ogle: Mortality in the Medical Profession.—Mr. Henry Lee: On the Tapetum Lucidum.

Wednesday, January 27.

NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 10 A.M.

MIDDLESEX HOSPITAL.—Operations, 1 P.M.

ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1.30 P.M., and on Saturday at the same hour.—Ophthalmic Operations on Tuesdays and Thursdays at 1.30 P.M.

ST. MARY'S HOSPITAL.—Operations, 1.30 P.M. Skin Department 9.30 A.M., on Tuesdays and Fridays.

ST. THOMAS'S HOSPITAL.—Operations, 1.30 P.M., and on Saturday at the same hour.

LONDON HOSPITAL.—Operations, 2 P.M., and on Thursday and Saturday at the same hour.

GREAT NORTHERN CENTRAL HOSPITAL.—Operations, 2 P.M.

UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M.; Saturday, 2 P.M. Skin Department: 1.45 P.M.; Saturday, 9.15 A.M.

ROYAL FREE HOSPITAL.—Operations, 2 P.M.

KING'S COLLEGE HOSPITAL.—Operations, 3 to 4 P.M.

HUNTERIAN SOCIETY.—8 P.M. Dr. Braxton Hicks: (1) Note on a Condition of Uterine Displacement in which Pessaries are Contra-indicated; (2) A case of Cephalic Version in Arm Presentation.—Dr. Galabin: On the Relative Advantages of Axis-traction and Ordinary Forceps, and on the Mode of making Correct Axis-traction with Ordinary Long-curved Forceps.

SOCIETY OF ARTS.—8 P.M. Mr. Henry Davey: Machinery in Mines.

BRITISH GYNÆCOLOGICAL SOCIETY.—8.30 P.M. Specimens will be shown. Address by Mr. Lawson Tait.

Thursday, January 28.

ST. GEORGE'S HOSPITAL.—Operations, 1 P.M.

ST. BARTHOLOMEW'S HOSPITAL.—Surgical Consultations, 1.30 P.M.

CHARING-CROSS HOSPITAL.—Operations, 2 P.M.

NORTH-WEST LONDON HOSPITAL.—Operations, 2.30 P.M.

ROYAL INSTITUTION OF GREAT BRITAIN.—3 P.M. Prof. W. Chandler Roberts-Austen: Metals as affected by Small Quantities of Impurity.

SOCIETY OF ARTS.—8 P.M. Mr. Wm. Bottomley, jun.: The Magnetism of Ships and the Mariner's Compass.

OPHTHALMOLOGICAL SOCIETY OF THE UNITED KINGDOM.—8.30 P.M. Dr. Thomas Reid: (1) Polarisation Spectroscope for Achromatopsia; (2) the same for determining the neutral points in Dichroic Vision; (3) A Perimeter for Colour Vision; (4) Ophthalmoscopes adapted for the Electric Light.—Mr. E. Nettleship: Fatal Meningitis after Enucleation.—Mr. Priestley Smith: Primary Glaucoma in relation to Age.—Mr. W. H. Jessop: On Herpes Ophthalmicus affecting the eye.—Mr. G. L. Johnson: (1) Atrophy of Iris, &c., following a blow on the head; (2) Conical Cornea improved by Stenopaic Glasses.—Mr. W. Lang (for Dr. J. W. Barrett): New Microtome.—Mr. H. Juler: Refraction Ophthalmoscope arranged for the Electric Light.—Dr. C. E. Fitzgerald: A new Instrument for facilitating Refraction Tests.—Mr. W. H. Jessop: A new Pupillometer.—Mr. W. Adams Frost: A new Model showing the Movements of the Eyes.—Mr. G. Hartridge: (1) Glaucoma in a girl aged fourteen; (2) Small Lenses.—Mr. R. M. Gunn: (1) Optic Atrophy after Wound of Orbit; (2) Ambiyopia from Bisulphide of Carbon; (3) Result of Operation on Eye damaged by severe Sympathetic Disease.—Living and Card Specimens at 8 P.M.

Friday, January 29

ST. GEORGE'S HOSPITAL.—Ophthalmic Operations, 1.30 P.M.

ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.

KING'S COLLEGE HOSPITAL.—Operations, 2 P.M.

ROYAL INSTITUTION OF GREAT BRITAIN.—9 P.M. Sir Wm. Thomson: Capillary Attraction.

Saturday, January 30.

KING'S COLLEGE HOSPITAL.—Operations, 1 P.M.

ROYAL FREE HOSPITAL.—Operations, 2 P.M.

MIDDLESEX HOSPITAL.—Operations 2 P.M.

ROYAL INSTITUTION OF GREAT BRITAIN.—3 P.M. Mr. Archibald Geikie: The History of Volcanic Action in the British Isles.

METEOROLOGICAL READINGS.

(Taken daily at 8.30 a.m. by Steward's Instruments.)

THE LANCET OFFICE, Jan. 21st, 1886.

Date.	Barometer reduced to Sea Level and 32° F.	Direction of Wind.	Dry Bulb.	Wet Bulb.	Solar Radia in Vacuo.	Max. Temp. Shade.	Min. Temp	Rain.	Remarks at 8.30 A.M.
Jan. 15	29·84	N.	41	40	...	48	33	...	Overcast
,, 16	29·74	N.W.	36	34	...	44	34	...	Fine
,, 17	29·53	N.W.	38	36	...	44	34	...	Cloudy
,, 18	29·06	W.	36	3	...	40	35	...	Overcast
,, 19	29·53	W.	30	...	...	37	27	...	Hazy
,, 20	29·52	N.E.	30	...	...	35	28	...	Fine
,, 21	29·34	N.E.	35	34	...	35	30	...	Snowing

Notes, Short Comments, & Answers to Correspondents.

It is especially requested that early intelligence of local events having a medical interest, or which it is desirable to bring under the notice of the profession, may be sent direct to this Office.

All communications relating to the editorial business of the journal must be addressed "To the Editor."

Lectures, original articles, and reports should be written on one side only of the paper.

Letters, whether intended for publication or private information, must be authenticated by the names and addresses of their writers, not necessarily for publication.

We cannot prescribe, or recommend practitioners.

Local papers containing reports or news-paragraphs should be marked.

Letters relating to the publication, sale, and advertising departments of THE LANCET *to be addressed "To the Publisher."*

"FROM DARKNESS TO LIGHT."

UNDER this heading a Liverpool contemporary recently published a sensational account of the recovery of sight by a man who was under the care of Mr. Emrys-Jones, of Manchester. The account was garbled and inaccurate, and we are glad to learn that Mr. Jones has promptly and publicly disclaimed all connexion with the production. The profession has always rightly set its face against the parade of medical technicalities in the lay press, an attitude which we venture to hope will be long maintained.

Hon. Surgeon-Major.—We think not. A bearer corps composed of undrilled men would be worse than useless.

"WAKES AND THE SPREAD OF SMALL-POX."

To the Editor of THE LANCET.

SIR,—Your Liverpool correspondent gives in your last issue (p. 133), under the above heading, some interesting particulars of a successful prosecution under Sect. 126 of the Public Health Act of 1875, but does not state explicitly the nature of the act of the "exposure" upon which the proceedings were based. If, as he seems to imply, the conviction was for holding a "wake" upon an infectious case in a private house, it is an important precedent. In somewhat similar circumstances I have always had to prove to the satisfaction of the magistrates that the place of exposure was, in the words of the section, a "street, public place, shop, inn, or public conveyance." The practice of holding "wakes" in such cases cannot be too strongly condemned; but even in towns where this foolish custom is happily rare, instances are of constant occurrence in which there is the most culpable and reckless exposure of infected persons, but which are, as it were, privileged by the well-meant limitation of the scope of the section.

I am, Sir, yours faithfully,

B. A. WHITELEGGE, M.D.
Nottingham, Jan. 16th, 1886. Medical Officer of Health.

"HYPERIDROSIS."

To the Editor of THE LANCET.

SIR,—In reply to "Enquirens," who asks in your last issue for a remedy in a case of hyperidrosis, I would venture to suggest the use of fluid extract of coca, to look well to the alimentary tract from beginning to end, and to observe if the saliva is acid, as also the perspiration. I have used nitro-muriatic acid with a certain amount of success when the saliva gives an acid reaction and when there has been excess of perspiration. If the above suggestion fails, I would first see that the liver was unloaded and acting well, and then administer hypodermic injections of quinine.

I am, Sir, yours faithfully,
Jan. 20th, 1886. DOUBLE QUAL.

NEGRO MORTALITY IN THE UNITED STATES.

THE statistics of mortality in the United States seem to show that the negro question—so far as it still exists—is likely to settle itself without extraneous interference. In six cities the negro death-rate has been kept quite distinct from that of the white population, and the result is certainly striking. In Louisville the white death-rate is 20·04 per 1000; among the blacks the death-rate is 34·76. In Washington it is 17·80 for whites; 35·45 for blacks. In Richmond, 19·12 and 31·95. In Baltimore, 22·71 and 37·61. In New Orleans, 25·41 and 35·61. In Charlestown, 25·76 and 45. Thus, in two of these cities the mortality among the blacks is almost exactly double that among the white population; in the others it is more than a third greater. If this rate of mortality be kept up, by the end of another century the black man will have almost disappeared off the face of the North American continent.

C. V.—The case is very interesting, and one not unlikely to arise, till the risk of high temperatures and the sometimes amazing efficiency of cold water in reducing them are better understood by the public. We fear there is no legal way out of our correspondent's difficulty. The fee is of the nature of an honorarium, which the bye-laws of the College forbid to be made the subject of a legal process. The satisfactory thing is that our correspondent and his consultant did what was right, and what they would have been blamed for not doing if their conduct had been submitted to any competent professional judge. It is quite likely that the father will come to realise this after a time, and a little allowance should be made for the difficulty of the parental and non-professional mind realising that all the distress, and death itself, were the result of a burning up of the body, which in many instances has been arrested by the cold bath. We should be glad to hear further from our correspondent.

Dr. Rummo (Naples).—We cannot exchange.

THE ADMINISTRATION OF THE CORONER'S "'QUEST."

To the Editor of THE LANCET.

SIR,—It is to be sincerely hoped that during the forthcoming session the Legislature will have sufficient time at its disposal to introduce a Bill for the better working and administration of the coroner's "'quest." The existing Acts are anything but a security and protection for human life. In this division of the county no fees whatever are paid either to jury or to witnesses. Half-a-crown is paid for the hire of the inquest-room, and, with the exception of the coroner's travelling expenses and the medical fees, the cost of an inquest amounts to a few shillings only. I could quote many cases that have lately come under my immediate notice where inquests should have been held. I will not, however, unnecessarily trespass upon your space, but will give one case as an example.

I was called on the 5th inst. to the Selling railway station, and found a healthy-looking woman of forty in the waiting-room, holding in her hand the fare which she was about to tender at the ticket-office, when, without a moment's warning, she fell down and expired without a murmur. About two hours elapsed before a county constable could be found, and when he arrived he was sent to communicate with the coroner. The constable did not search the woman, nor did he in any way examine her, but simply took my letter to the coroner, in which I reported that "the cause of death was quite unknown." The coroner sent a verbal message to the effect that a post-mortem examination or inquest was unnecessary.

After a case like this, it would appear that in certain instances a coroner's "'quest" is useless. If a coroner can sign the cause of death upon the report of a county constable, a medical man might say that he was justified in certifying the cause of death upon the statement made by a well-educated but unqualified assistant. What was the cause of this poor woman's death I cannot say. Whether she took cyanide or died from aneurysm, &c., I do not know.—I remain, Sir, yours truly,

Faversham, Kent, Jan. 11th, 1886. CHARLES CHITTENDEN.

"JEMIMAS."

To the Editor of THE LANCET.

SIR,—In answer to "One of your Non-professional Readers," will you allow me to say that "jemimas" may be bought at Thornton's, Boar-lane, Leeds. The price is 7*s.* 6*d.*, not 7*s.*, as I stated, and by parcel post 8*s.* In my original letter the address of the shop was not given, as I supposed that the snow-boots referred to were to be had in most large towns.

I am, Sir, yours faithfully,
Leeds, Jan. 18th, 1886. T. PRIDGIN TEALE.

SEA VOYAGE FOR INVALIDS.

To the Editor of THE LANCET.

SIR,—Can any of your readers inform me if there is any good work published which would give information on the treatment of delicate persons on a long sea voyage? Or I should be obliged to any who could inform me whether a sailing vessel or steamer is preferable for such persons undertaking a voyage to Australia, and the difficulties likely to be encountered in each case. I am, Sir, yours faithfully,
Jan. 19th, 1886. PHYSICIAN.

A SUPPOSED RUSSIAN CURE FOR HYDROPHOBIA.

P. H. C. writes to give an account of an alleged treatment and cure of hydrophobia. It is inferred that certain pustules are always present under the tongue. The treatment consists in rupturing the pustules when ripe, and taking every precaution to prevent the patient from swallowing the contents of the pustules. There is, however, nothing in the account that bears on the face of it any great degree of probability.

Practitioner (Manchester) has not enclosed his card.

Mr. G. Brown (Tasmania) should consult Dr. Michael Foster's Physiology.

DIAGNOSIS OF THE SEX OF THE FŒTUS.

To the Editor of THE LANCET.

SIR,—Having made a long series of observations on this subject (mentioned in an annotation in your issue of Jan. 9th, page 89), the results obtained may be of interest to your readers, as throwing a little more light on a subject not much studied.

I examined patients at every period of pregnancy, from the fourth month to full term, and a large number during labour. The earliest period at which I heard the fœtal heart was the latter half of the fifth month; but, on account of variations at different periods and the difficulty of accurately counting the heart-beats, I kept strictly to observations made during the last fortnight of pregnancy in drawing my conclusions. I found that observations made during labour had several sources of error, and I presume that this partly accounts for the high figures given in your extract from Señor Bidart's paper. Perhaps also race may have something to do with it. I have often had occasion to observe the peculiarly slow pulse of those of Scandinavian origin (frequently forty to fifty per minute in health), and the normally rapid pulse of some of the coloured races; so I conclude that the Chilian fœtus must have a more rapidly beating heart than its British contemporary. Having eliminated all observations during labour, and those in which I could not be certain of the exact heart-rate, I concluded from an analysis of the remainder that it is generally safe to conclude when the rate of the heart-beats is under 130 per minute that the fœtus is a male, and if over 140 that it is a female. Between 130 and 140 it is rash to prophesy. Further, I found that the cause of error between these limits is the size of the fœtus, for a small boy may have a rate of 137 per minute, while a large girl has only 133. That those who wish to test for themselves the correctness of observations on this subject may not be discouraged by failure, I may mention some of the causes of difficulty in hearing the fœtal heart in the last month. The commonest are (1) dorso-posterior positions of the fœtus, (2) excess of liquor amnii, (3) thickness of the abdominal parietes in fat women, and (4) excess of flatus in the intestines. It is essential to success to have (1) absolute quietness, therefore examination should be made if possible late at night; (2) an exact knowledge of the position of the fœtus, obtained by external palpation; (3) repeated examinations; (4) patience. The movements of the fœtus greatly modify the rate of the heart-beats, but the rate is not influenced by variations in the maternal pulse. I cannot give my observations on the influence of drugs and articles of diet on the fœtal heart, as they were not completed.—I am, Sir, yours faithfully,

Douglas, Isle of Man, Jan. 14th, 1886. ERNEST BLACK.

A FOREIGN BODY IN THE ARM FOR TWENTY-TWO YEARS.

To the Editor of THE LANCET.

SIR,—Whilst assisting in the practice of Dr. J. Brindley James of Bermondsey the following case came under my notice.

On the 2nd inst. G. F——, aged fifty-five, a porter, sought advice. He was suffering from a swelling on the flexor surface and ulnar side of the arm, about three inches above the wrist. The history of the case is as follows:—In May, 1863, the patient was "letting off" a rifle-cap by means of striking it with a hammer when the cap discharged, part of it striking his arm and penetrating the skin on the radial side, about two inches above the wrist. Becoming alarmed on account of there being severe hæmorrhage, he went to Guy's Hospital, where he was told that he had wounded an artery. The wound was not examined by a probe, but merely a pad of lint and a bandage applied, which had the desired effect of stopping the hæmorrhage. Everything went on well until five weeks previous to my seeing the patient, when he began to experience slight darting pain occasionally on the opposite side from that on which the injury had been inflicted. Finding when I saw him that the swelling above referred to possessed all the characteristics of an abscess, I followed the usual plan of treatment—that of incision, evacuating about half a drachm of pus. I then examined the interior with a probe, and detected a metallic foreign body. Enlarging the opening, I withdrew by means of a pair of dissecting forceps what appeared to be about one-third of a side of an ordinary gun-cap, which presented no peculiar feature, excepting that it had become black.—I am, Sir, yours obediently,

Jamaica-road, S.E., Jan. 18th, 1886. C. FRANKLIN WRIGHT.

THE ALBO-CARBON LIGHT.

To the Editor of THE LANCET.

SIR,—In reply to Mr. J. Hopkins Walters, I may state that I have used albo-carbon exclusively ever since its introduction (about six or seven years ago) for the lighting of my entrance-hall, and have never found it produce any irritation in the air-passages.

I am, Sir, yours faithfully,

Clifton, Jan. 16th, 1886. G. T. THOMSON, M.D.

FOUR PERFECT ARMS AND LEGS.

A WOMAN at San Vicente, in Spain, has lately been delivered, after a very difficult labour, of a female child, perfectly formed, but with two perfect supernumerary arms springing from the scapulæ, and two corresponding supernumerary legs arising from the ischia. The supernumerary limbs move with the others. The child is in perfect health; but the father, not, of course, liking such a monstrosity for a daughter, proposes to take the child to Barcelona, to see whether the surgeons of the medical faculty there will accept the responsibility of removing the redundant limbs.

Quæsitor.—We advise no such communication. Time and experience may induce a better estimate of the value of medical service. But the dignified course is absolutely to leave the patient to his own freedom.

PRURITUS AND COFFEE-DRINKING.

To the Editor of THE LANCET.

SIR,—In several of your late issues the connexion between the habitual use of coffee and pruritus ani has received attention from various correspondents. That this is one of the effects of the practice has long been known to me; and I would suggest that it may arise from the effect upon the liver which coffee is popularly supposed to have, and that is, of rendering it inactive. But there are also in coffee constituents some of which may give rise to this symptom. There is a highly flavoured essential oil which gives its characteristic odour to the urine, while at the same time some of the colouring matter is excreted by the kidneys. Possibly coffee may be like other spices which produce irritation about the anus. My chief object in writing to you, however, is to inform your correspondent, "A. W." (THE LANCET, Jan. 9th, p. 92), that there is a remedy for pruritus ani which I have found to give the greatest relief—viz., to lightly smear the anus and its immediate neighbourhood with the glycerine of carbolic acid of the Pharmacopœia, and then gently wipe it off with a soft handkerchief, next morning washing it with good glycerine soap and warm water. A few days of this treatment will, in my experience, effectually relieve this distressing symptom. Probably it is some of the extractive matters of coffee which give rise to the symptom complained of; for I do not find that the administration of caffeine in large doses for a considerable time produces it, which is a fortunate circumstance in the matter of so useful a drug as caffeine.

I am, Sir, your obedient servant,

Leamington, Jan. 11th, 1886. THOS. W. THURSFIELD, M.D.

SPINA BIFIDA.

IN the report of Mr. Clutton's case at the meeting of the Clinical Society (THE LANCET, Jan. 16th, page 108, twenty-second line from top of second column) the word "running" should have been omitted.

MEATH HOSPITAL, DUBLIN.

To the Editor of THE LANCET.

SIR,—With your usual kindness, would you allow me to mention through your columns to the many readers of THE LANCET who were students at the Old Meath Hospital, Dublin, that I am at present engaged in tabulating in book form the names, addresses, period of study, qualifications, and present appointments of all old students of the hospital, no matter in what part of the world they are at present located. In order that my compendium should be complete, if those who see this letter would kindly forward to me as soon as possible the desired information, it would be esteemed as a very great favour. To save trouble, a postcard will in most cases be sufficient, provided the name and address are clearly and plainly written.—I am, Sir, yours truly,

D. HEPENSTAL ORMSBY, M.D., F.R.C.S.,

Surgeon to the Meath Hospital and Co. Dublin Infirmary.

4, Merrion-square West, Dublin, Jan. 16th, 1886.

SEPARATE EXAMINATION IN MECHANICS.

To the Editor of THE LANCET.

SIR,—A student who has passed an examination recognised by the General Medical Council, but which does not include mechanics as one of its subjects, can obtain a separate examination here in that subject, and a certificate of having passed it will be accepted by the General Medical Council for registration. "An Anxious Parent and a F.R.C.S." need not, therefore, send his son so far from home for examination in mechanics, as is suggested by your correspondent, "Wm. M. D. G.," in your issue of the 16th inst.—I am, Sir, your obedient servant,

T. PEREGRINE, M.D.,

Secretary to the Board of Examiners.

Apothecaries' Hall, Blackfriars, E.C., Jan. 19th, 1886.

VOLUNTEER CHOIR.

To the Editor of THE LANCET.

SIR,—The London Diocesan Council for the Welfare of Young Men are instituting a volunteer choir for the services on Sunday afternoons at St. Martin's-in-the-fields. Among the students at the London hospitals there are no doubt many who would volunteer to join, and the Secretary, Mr. J. Johnstone Bourne, Northumberland-avenue, will be pleased to receive their names and give any further particulars required.

I am, Sir, yours obediently,

Arma House, Onslow Gardens, Jan. 11th, 1886. EDGAR P. STRINGER.

NITRO-GLYCERINE.

Mr. Foy writes that the necessity of the profession having some elected members on the Medical Council is fully proved by the action of that body in the preparation and editing of the recent edition of the Pharmacopœia. Our correspondent states that of new drugs which the profession has adopted, nitro-glycerine is perhaps the most largely and generally used, and it is desirable that it should be prepared in a form easily carried, quickly obtained, keeping well, readily administered, and inexpensive. These advantages, Mr. Foy contends, are obtained in a greater degree in an alcoholic solution than in the chocolate creams, and, in his opinion, this is the preparation that should have gained the approval of the Council.

Fidelis.—Certainly so. B's successor has doubtless bought the practice subject to the engagement of A to B not to practise. B's having become qualified only enhances his moral obligations.

TREATMENT OF A SPLIT FINGER-NAIL.

To the Editor of THE LANCET.

SIR,—In reply to your correspondent, "Rus," who asks for advice as to the treatment of his split finger-nail, I would suggest the following plan, which I have tried with complete success in a similar case:—A groove, one-eighth of an inch long and parallel to the root of the nail—i.e., at right angles to the split—should be made with a knife or small file in the sound portion of the nail, between the root of the nail and the split. This will form a barrier which the split cannot pass, and when the groove grows to the free margin of the nail there will be no further tendency for the trouble to recur.

I am, Sir, yours truly,

Upper Berkeley-st., W., Jan. 16th, 1886. R. C. PRIESTLEY, M.R.C.S.

SIGNS OF FŒTAL DEATH.

To the Editor of THE LANCET.

SIR,—The absence of a certain sign of fœtal death whenever the question of version and forceps comes up is acknowledged to be one of the weak points in obstetrics. Now, I would suggest that the hand should be introduced into the uterus and placed on the fœtal heart. By this means absolute certainty would be attained, and many a mother saved from the dangers of forceps, and especially from the dangers of version where the waters have drained away. Of course, if no fœtal heart movements were felt, then perforation would be resorted to. I hope the above suggestion will prove useful when there is any doubt as to the death of the fœtus. I am, Sir, yours truly,

ALF. BELL WHITTON, M.B., C.M.Edin.

Maternity Hospital, Glasgow, Jan. 19th, 1886.

COMMUNICATIONS not noticed in our present number will receive attention in our next.

COMMUNICATIONS, LETTERS, &c., have been received from—Mr. Godlee, London; Dr. Brailey, London; Dr. Hassall, San Remo; Mr. Murrys-Jones, Manchester; Mr. J. H. Morgan, London; Dr. Stanley Haynes, Malvern; Mr. Ford, London; Mr. Stanley Nelson; Dr. Wilkinson; Mr. F. W. Allwright, Woburn; Mr. A. J. Smith, Dublin; Mr. W. H. Browne, Aldbrough; Dr. Whitelegge, Nottingham; Mr. C. Macalister, Manchester; Mr. B. East, London; Dr. Thomas, Sheffield; Mr. C. S. Jeaffreson, Newcastle-on-Tyne; Dr. Ormsby, Dudlin; Mr. Sweeting, London; Dr. Barrett Roué, Clifton; Prof. Dunstan, London; Mr. A. Braxton Hicks, London; Dr. Ozanam, Paris; Surgeon-Major Staples, Gibraltar; Mr. G. C. Richardson, Bury; Dr. Gowers, London; Mr. E. Black, Douglas; Dr. Huggard, Geneva; Dr. Illingworth; Mr. Stites, Morristown, N.J.; Mr. Rowling, Paramatta; Mr. C. d'A. Collins, Guernsey; Mr. Barlow, Dalston; Mr. R. Griffiths; Dr. Macdougall, Carlisle; Dr. Peregrine, London; Mr. Stringer, London; Dr. Barney Yeo, London; Mr. Lindsay, Leith; Mr. G. Foy, Dublin; Dr. Playfair, London; Dr. R. F. Willoughby, London; Mr. Sisca; Mr. Pridgin Teale, Leeds; Mr. Mansergh, London; Dr. Peddie; Dr. Downes, Chelmsford; Dr. Thomson, Clifton; Mr. Priestley, London; Mr. Ellis Lever, London; Dr. Bampton, Plymouth; Messrs. Edis and Co., Huntingdon; Dr. Maunsell, Welford; Mr. Darke, London; Mr. H. H. Clutton, London; Dr. Richardson, London; Mr. O'Donovan, Liverpool; Mr. Verlaj, Wiesbaden; Mr. Roberts, Penygroes; Dr. Hawer, Wirksworth; Mr. Percival; Dr. Canter, Italy; Messrs. Maclachlan and Co., Edinburgh; Messrs. Cassell and Co., London; Mr. Yolland, London; Dr. Seaton, Sunbury; Mr. Bennett, Liverpool; Messrs. Lee and Nightingale, Liverpool; Mr. Engleby, Manchester; Mr. Wheeler, Ilfracombe; Messrs. Lee and Martin, Birmingham; Messrs. Roberts and Co., Manchester; Messrs. Dale and Co., London; Messrs. Allen and Hanburys, London; Mr. Knowles; Mr. Birchall; Mr. Burgess, Walworth; Messrs. Bennett Bros., Salisbury; Dr. Leeson, Twickenham; Mr. Trieſus, London; Messrs. Thomas and Co.; Mr. Fidler, St. Helens; Messrs. Towers and Co., Bayswater; Messrs. McMurry and Co.; Mr. Armstrong, Manchester; Dr. Philpots; Mr. Maxwell, Lasswade; Mr. Hodgkinson, London; Dr. Byers, Belfast; Messrs. Weiss and Co., London; Dr. Gordon, Worthing; Messrs. Schomoele and Co.; Mr. Gilbert Smith, Birmingham; Mr. Radley; Mr. McDonagh, London; Mr. Harrison, Liverpool; Mr. Craske, London; Dr. Cribb, London; Mr. McNicoll, Southport; Captain Joynson; Herr Kreidel, Wiesbaden; Dr. McKeown, Belfast; Mr. D. M. Lamond; Mr. Simeon Snell, Sheffield; Mr. Whitton, Glasgow; Mr. R. P. Quinn, Manchester; Mr. Hadley, London; Surg.-Major Boustead; Mr. Chauncy Puzey, Northwich; Deputy Surg.-Gen. Hanbury; Messrs. Simpson and Renshaw, London; Dr. Knowles; Mr. Northey; Messrs. Stead and Co., Leicester; Mr. Baker, Newport; Messrs. Clarke and Co., Leicester; Mr. Andrews, Stockport; Mr. Wylde, Exeter; Mr. Russell, Liverpool; Mr. Unsworth, Liverpool; Mr. Partridge, Brompton; Mr. Tumner, Harrogate; Dr. Palm; C. F. M.; J. C. S.; Fairplay; N. P.; M.B.; Quæsitor; Graduate, Bournemouth; C. V.; Fidelis; X.; J. N. W.; M. O. D., Liverpool; Double Qual.

LETTERS, *each with enclosure,* **are also acknowledged from**—Dr. Charteris, Glasgow; Mr. Holtby, York; Mrs. Blumenthal; Messrs. Towers and Co., Bayswater; Dr. Brooks, Wellington; Mr. Paterson, South Stockton; Mr. Idenden, Hastings; Mr. Sime, Sheffield; Mr. O'Flaherty, Wallsend; Dr. Saville, Redforth; Mr. Roberts; Mr. Chavasse, Birmingham; Mr. Draper, Huddersfield; Mr. Gard, London; Mr. Kidd, West Brighton; Mr. Palmer, Chard; Mr. Rugg, Dover; Mr. Lyon, Hodnet; Mr. Woolhouse, Sheffield; Mr. Low, Plumstead; Dr. Adam, West Malling; Mr. Davidson, Aberdeen; Mr. Atkinson, Darlington; Mr. Hayward, Grantham; Mr. Anderson, Kirkwall; Dr. Grant, Manchester; Dr. Kennedy, Hammersmith; Mr. Honey, Bath; Mr. Heap, Bournemouth; Dr. Sutton, Scinde; Mr. Milward, Brixton; Mr. Dixon, Manchester; Messrs. Thompson and Co.; Mr. Plowman, North Curry; Dr. McGeogh, Liverpool; Mr. Wheeler, Ilfracombe; Mr. L. Dodd, Teignmouth; Dr. McKenzie, Leith; Messrs. A. and C. Black, Edinburgh; Mr. Morgan, Islington; H. P., Tunbridge Wells; Medicus, Southsea; M.B., C.M., Rhyl; M.B., London; Matron, Bedford Infirmary; Cocaine; A. W., Whitby; M.B.; S. B., Wandsworth Common; Surgeon, Manchester; Secretary, Bath; R. C. P., London; Medicus, Bristol; Treasurer, Rotherham Hospital; H. E. P.; R. G., Spennymoor; A. L. M., Chichester; G. P., Southampton; A. B. C., South Kensington; J. H., Pentonville; A. X. P.; W. T., Shepherd's Bush; M.R.C.S., Grantham; Beta, Llanfyllin.

Bournemouth Visitors' Directory, Liverpool Mercury, Nottingham Daily Express, Port Elizabeth Telegraph, Scotsman, Edinburgh Evening News, Leith Herald, Belfast Northern Whig, &c., have been received.

SUBSCRIPTION.

POST FREE TO ANY PART OF THE UNITED KINGDOM.

One Year	£1 12 6	Six Months	£0 16 3
To CHINA AND INDIA	One Year		1 16 10
To THE CONTINENT, COLONIES, AND UNITED STATES	Ditto		1 14 3

Post Office Orders should be addressed to JOHN CROFT, THE LANCET Office, 423, Strand, London, and made payable at the Post Office, Charing-cross.

Notices of Births, Marriages, and Deaths are charged five shillings.

Cheques to be crossed "London and Westminster Bank."

ADVERTISING.

Books and Publications (seven lines and under)		£0	5 0
Official and General Announcements		0	5 0
Trade and Miscellaneous Advertisements		0	4 6
	Every additional Line	0	0 6
Front Page	per Line	0	1 0
Quarter Page		1	10 0
Half a Page		2	15 0
An entire Page		5	5 0

The Publisher cannot hold himself responsible for the return of testimonials, &c., sent to the office in reply to advertisements; copies only should be forwarded.

NOTICE.—Advertisers are requested to observe that it is contrary to the Postal Regulations to receive at Post-offices letters addressed to initials only.

An original and novel feature of "THE LANCET General Advertiser" is a special Index to Advertisements on page 2, which not only affords a ready means of finding any notice, but is in itself an *additional* advertisement.

Advertisements (to ensure insertion the same week) should be delivered at the Office not later than Wednesday, accompanied by a remittance.

Answers are now received at this Office, by special arrangement, to Advertisements appearing in THE LANCET.

Terms for Serial Insertions may be obtained of the Publisher, to whom all letters relating to Advertisements or Subscriptions should be addressed.

Advertisements are now received at all Messrs. W. H. Smith and Son's Railway Bookstalls throughout the United Kingdom, and all other Advertising Agents.

Agent for the Advertising Department in France—J. ASTIER, 66, Rue Caumartin, Paris.